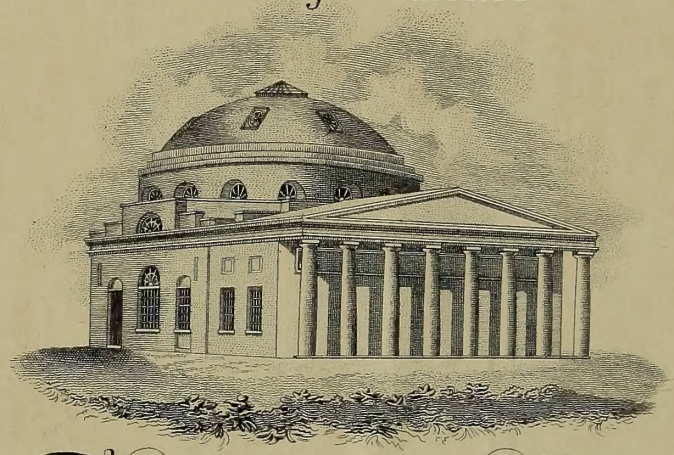
Retrieved JAN 16 1941

LIBRARY
OF THE
School of Medicine



University of Maryland

University of Maryland Thesis

Early Doctor of Medicine and Doctor of Physic Dissertations with Corrected Tables of Contents

These manuscripts described as either an Inaugural Dissertation or an Inaugural Essay were presented to the University of Maryland for the Degree of Doctor of Medicine and/or Doctor of Physic during the years 1813-1887. The individual dissertations were bound together during the 1940's. The original tables of contents for the bound volumes contained multiple errors in authors' names, titles, and/or years. To address these errors, an additional "Corrected Table of Contents" has been inserted at the beginning of each volume.

The project team who investigated and corrected the tables of contents were: Richard J. Bobbitt, Historical Library/Preservation Officer; Maria Milagros Pinkas, Metadata Management Librarian; Angela Cochran and Carol Harding-Henry, Resources Division; Sarah Horsle, Alex Schoor and Megan Wolff, Services Division.

These dissertations were digitized in 2011-2012 and are available at the UM Digital Archive (archive.lib.umaryland.edu) and the Internet Archive (www.archive.org).

University of Maryland Theses

Early Doctor of Medicine and Doctor of Physic Dissertations with Corrected Tables of Contents

These manuscripts described as either an Inaugural Dissertation or an Inaugural Essay were presented to the University of Maryland for the Degree of Doctor of Medicine and/or Doctor of Physic during the years 1813-1887. The individual dissertations were bound together during the 1940's. The original tables of contents for the bound volumes contained multiple errors in authors' names, titles, and/or years. To address these errors, an additional "Corrected Table of Contents" has been inserted at the beginning of each volume.

The project team who investigated and corrected the tables of contents were Richard J. Behles, Historical Librarian/Preservation Officer; María Milagros Pinkas, Metadata Management Librarian; Angela Cochrane and Carol Harling-Henry, Resources Division; Sarah Hovde, Abra Schnur and Megan Wolff, Services Division.

These dissertations were digitized in 2011-2012 and are available at the UM Digital Archive (archive.hshsl.umaryland.edu) and the Internet Archive (www.archive.org).

(CORRECTED TABLE OF CONTENTS)

UNIVERSITY OF MARYLAND

THESES

1852 (a)

Author	Title	Notes
Gorman, Robert	Clinical Report of Six Cases	
Lincoln, Nathan S.	Rubeola	
Knotts, George P.	Diseases of the Mind	
Muller, John R.	Apoplexy	
Bartholow, Roberts	Calori Animali (faded ink)	**(Latin)**
Stonesifer, Lewis	Ergota	
Gray, Albert W.	Podagra (partially faded ink)	
France, George W.	Necrosis	
Hawkins, Peter W.	Clinical Report of Six Cases of Disease	
Frey, William Jr.	Puerperal Peritonitis	
Manning, Anthony L.	Duties of a Physician	
Cunningham, Charles	Intermittent Fever (stained)	
Field, Philip L.	Opium	
Davis, Henry W.	Medical Topography	
Arnold, Edward A.	Surgery	
Burkhardt, William	Phenomenon of Life (no title page)	

HSHSL 2012 for the UM Digital Archive. Sources consulted for corrections: Original Dissertation; University of Maryland Medical Faculty, Matriculation List, 1821-1851; Cordell, Eugene F. "University of Maryland, 1807-1907" (New York : The Lewis Publishing Company, 1907), Volume 2.

Author	Title	Notes
Stonestreet, E.E.	Clinical Report of Six Cases	
Neale, F.C.	Inflammation	
Wroth, William J.	Clinical Report of Six Cases of Disease	
Johnston, Robert	Phthisis Pulmonalis	
Hardey, William H.	Pneumonia	
Ross, William T.H.	Pathology of Dropsy	(partially faded ink)
Hoxton, T.S.	Inguinal Hernia	

HSHSL 2012 for the UM Digital Archive. Sources consulted for corrections: Original Dissertation; University of Maryland Medical Faculty, Matriculation List, 1821-1851; Cordell, Eugene F. "University of Maryland, 1807-1907" (New York : The Lewis Publishing Company, 1907), Volume 2.

UNIVERSITY OF MARYLAND

THESES

1852 (a)

Gorman, Robert	Clinical Report of Six Cases	33p.
Lincoln, Nathan ~~L.~~ S.	Rubeola	14p.
Knotts, George P.	Diseases of the Mind	32p.
Muller, John R.	Apoplexy	23p.
Bartholow, Robert~~sus~~	Calori Animali (Latin)	19p.
Stonesifer, Lewis	Ergota	26p.
Gray, Albert W.	Podagra	30p.
France, George W.	Necrosis	33p.
Hawkins, Peter W.	Clinical Report of Six Cases of Disease	49p.
Frey, ~~Wm.~~ William Jr.	Puerperal Peritonitis	23p.
Manning, Anthony L.	Duties of a Physician	17p.
~~Cuppingham~~ Cunningham, Charles	Intermittent Fever	~~24~~ 34p.
Field, Philip L.	Opium	27p.
Davis, Henry W.	Medical Topography	30p.
Arnold, Edward A.	Surgery	19p.
Burkhardt, ~~Wm.~~ William	Phenomenon of Life	13p.
Stonestreet, E. E.	Clinical Report of Six Cases	25p.
Neale, F. C.	Inflammation	43p.
Wroth, ~~Wm.~~ William J.	Clinical Report of Six Cases of Disease	45p.
Johnston, Robert	Phthisis Pulmonalis	19p.
Hardey, ~~Wm.~~ William H.	Pneumonia	27p.

721
Ro45

Ross, ~~Wm.~~ William T. H.	Pathology of Dropsy	23p.
Hoxton, T. S.	Inguinal Hernia	19p.

5

A Clinical Report of Six Cases

Submitted for the examination of the Provost, Regents, and Faculty of Physic of the University of Maryland for the Degree of Doctor of Medicine.

by

Robert Gorman

of

Florida

Baltimore Md

March 1852.

1Mb
1890

Case of Typhoid Fever

Wm Carroll – Aged 28 years – Admitted, as a patient, in the Baltimore Infirmary March the 31st, 1851 – He is a native of Ireland – Has been five years in America – He is a labourer in the gas house in Baltimore – Has been five days sick – His previous health was good – There is no sickness at the House where he boarded – For several days previous to his illness he felt lightness of the head and general debility – Had some cough and headache – On Thursday the 27th March he felt dull and drowsy – Had frequent rigors succeeded by flushes of heat – Suffered from headache, pain in his back and soreness over his body generally – Had no appetite whatever, but much thirst – Has had shiverings succeeded by increased heat of the surface every day since he became ill. On Friday the 28th March he was so much prostrated that he could not perform his du-

-ties, but took to his bed — Had epistaxis on Thursday, Saturday and Sunday — Took epsom salts on Friday the 28th and also on Sunday the 30th which purged him freely — Thinks his bowels were costive before — Since first taken sick he has had deafness, tinnitus-aurium and vertigo. When admitted in the House his pulse was 120 per min — Countenance dull and stu-pid — Was suffering with pain in his head, back and limbs — Had some cough — Consider-able thirst and heat of skin — Had epistaxis again to day (March 31st) — Staggered in walking to his bed — His hair was cut off and cold applied to his head — Was put on Al-kaline Solution composed of Bicarb. Sodae ℥ij .. Chlorat. Potash ℥j .. Aquae ℥vj ℞ Dose table spoon-ful every 2 hours — Apr. 1st. Has muttering delirium at intervals — some sordes on his teeth and lips — Tongue dry and brownish — Respiration 28 per min — Is very drowsy and stupid — Bowels rather loose — Was

cupped on the back of the neck to relieve the cerebral symptoms and the Alk. Solution continued. Apr. 2d Patient is easier to day — is not delirious — Had epistaxis this morning which seems rather to benefit him than otherwise by relieving the head symptoms — Has gurgling in the right ileo-cecal region — Pulse early in the morning about 84 per. min. — At 12 Oc. it was 68 per. min. —
Alk. Solution continued — Body sponged with cold water as often as agreeable to the patients feelings — No rose spots yet present — Bowels sufficiently lax without the administration of cathartics — Has very little appetite for food — skin cool to day — Some meteorism of the abdomen —
Apr. 5th, Since the 2d inst, there has been constantly present febrile symptoms such as before described — To day patient is doing very well — Pulse 75 per. min. — appetite returning — No rose spots have yet appeared on the abdomen

Abdomen still a little meteoric — Tongue cleaning — Some sordes on the teeth — Has no headache or bleeding from nose — The pains in his arms and lower extremities, which he complained of, are less severe — Apr. 12th Patient doing well — Has been taking an emulsion composed of Gum. Acacia: ℥ss = Nitrate Potass: ʒj = Tartar. Emetic grj = Aqua ℥xij ℞ Dose table spoonful every 2 hours — This was continued two days and suspended — Alk, Sol, continued — Has had epistaxis to such an amount that it was necessary to plug the nostrils — There has been no rose coloured eruption over the abdomen in his case — An aperient has been requisite once or twice to move his bowels — The treatment and management above detailed was continued for some days when the patient left the House convalescent.

Case of Intermittent Fever

Michael Lane — Aged 14 years — Came into the Baltimore Infirmary, as a patient, Oct the 1st 1851 — Is a native of Ireland — Has been 5 years residing in the U. S. — Lives at present on Federal Hill Baltimore — His Mother died 5 weeks ago of Phthisis Pulmonalis — Patient was taken sick 6 days ago with pain in his back and limbs, and afterwards had a chill, followed by fever and sweating — The chills have continued coming on daily at about the same hour (4 Oc. P.M.) until yesterday when it came on about 10 Oc. A.M. — His condition when admitted in the House was as follows — Pulse natural — Skin rather warmer than natural — Tenderness over the epigastrium — Tonic splenic enlargement — Bowels not moved to day — Appetite bad — Has thirst — Tongue slightly

fured — Treatment — Patient was put on Quinine grs. iij every 2 hours — Mild diet directed — 5 Oc. P.M. not much change in patients condition since morning — Pulse 100 per min, — Temperature of skin nearly natural — Bowels were moved about 4 Oc this evening — Has no headache — Some pain in left side — Has some thirst. Oct 3d Patient feels some better to day — Has no fever — Had no chill or rise of fever yesterday — Pulse good — Skin natural — Tongue very slightly furred — Has no headache — Bowels not moved since yesterday evening — Appetite still bad — Has some thirst — Quinine grs iij every 2 hours ordered to be continued — Oct 4th Patient had no fever yesterday — Bowels constipated — Still has pain in left side — Pulse good — Skin natural — Tongue little furred yet — Slept well last night — Ordered Castor-Oil zij at 5 Oc. if his bowels

should not be moved before —

℞ Iodide: Potass: ʒj } Mix and make an
Iodine: grs x } Ointment — Portion to be
Adipis: ℥j } rubed over the spleen
tor, die, to promote absorption — Quinine grs.
iij to be given every 4 hours instead of every
2 hours — Oct 5th Patient is better — Has
had no rise of fever — Bowels regular —
Sleeps well at night — Tongue natural
in appearance — Pulse natural in force
and frequency — Temperature of skin
pleasant — Appetite returning — Has had
no return of the chills or fever since
he has been under treatment — Quinine
ordered to be continued as before direc
-ted — Oct. 7th Still improving — Has no fe
-ver — Tongue clean — Pulse and skin nat
-ural — Begins to enjoy his food again —
Slept well last night — Has no pain —
Quinine stoped and instead Tonic Powders order
-ed — Composed of Pulv. Cinchona: ℥j — Sort: Ferri ʒij

Pulv. Allspice: ℥j ~~℞~~ Dose teaspoonful 3 times daily — Oct 8th Patient still improving — Tonic Powders ordered to be continued as before directed — Patient left the Hospital to day convalescent (T.)

Case of Pneumonia

Roger Coyle — Aged 3[illegible] years — Was admitted in the Bellevue Infirmary Sept. the 1st, 1851 — Is a native of Ireland — Has been living in America 15 years — Is a labourer on the Rail Road near Balt. — Does not know if any of his family died of Phthisis — Three years ago he had an attack similar to the present one — On Friday last he was taken sick with vomiting, headache and cough — Also pain in his back — Stitch in right side and fever — Was also suffering with Dyspepsia — These symptoms have continued up to the present time — Took a dose of Calomel, before coming into the Hospital, which purged him freely — Condition when admitted as follows — Fullness about the head and deafness — Cheeks of a dusky red hue — Respiration 36 per. min. — Pulse 136

Was pain in right side, over the superior lobe of right lung, which is increased by a deep inspiration — Was much thirst and headache — Bowels moved once to day — Was cough with expectoration slightly rusty coloured — Physical signs= Some dullness over the superior lobe of right lung anteriorly — Not much increase of Vocal thrill — Fine crepitation abundant — Was Bronchophony — Was cupped this morning over the seat of pain, and put on Tartar Emetic gr ½ every 2 hours — Sept 2d Ordered this morning venesection according to effect on pulse — Continue Tartar Emetic — If it irritate the stomach diminish the dose — Also

℞ Heydog. Protochlor: grs xxvj
Tartrate: Ant: grs ij
Tach Alba: ℥j
} Made into 8 powders — One to be given every 3 hours —

Sept 3d, Patients condition worse to day — Respiration 32 — Pulse 92 — Tongue heavily

coated with a yellowish brown fur — Bowels have not been moved since the 1st inst. — Pneumonic inflammation extending — The Tartar Emetic emulsion was discontinued yesterday as it caused considerable gastric irritation — Ordered 4 cups between the scapulae — Stop the powders as they irritate the stomach and give the following Rx —

Blue-Mass: ℥ss } made into 8 pills — One
Pulv: Ipecac: grs viii } to be given every 2 hours
Also Rx Tartar Emetic grs ii } Dose table-spoonful
Aquae ℥viii } between every 2 of the above pills — 6 Oc. P.M. Condition now admitting an opiate the pills were ordered to be stopped and the following given —

Rx Blue-Mass: grs xxiv } Made into 8 powders —
Pulv: Doveri: grs xxiv } One to be given every 3
Sach Alba: grs xxiv } hours — Continue Tartar Emetic emulsion — Left 4th Patient is still very weak, but upon the whole this condition is better —

Pulse 96 — Respiration 26 — Air enters more freely into the upper lobe of the affected lung but fine crepitation can be heard extending lower down — Bowels were moved twice last night — Has less tenderness over the epigastrium, but the stomach being still irritable the medicine containing Dover's powder was stopped, and Blue Mass grs iii = Opium gr ¼ every 3 hours substituted instead — Continue Tartar Emetic emulsion — 5 Oc. P.M. Symptoms generally better this evening except the gastric irritability — Tartar Emetic ordered to be stopped — Continue pills of Blue Mass and Opium — Denude a small surface over the stomach with Aqua Ammoniae, and sprinkle Morphia gr ¼ upon it to calm the gastric irritation — 9 Oc P.M. patients condition indicates that he is considerably narcotized — Pupils contracted — Hands cold — Profuse perspiration over the surface of the body — Pulse weak — Respiration very slow — Has had hiccough since 7 Oc

Pills ordered to be stopped, and a small quantity of Creasote given to relieve the hiccough. — Sept. 5th Condition much better as regards the Pneumonic affection — He enters the affected lung more freely — Respiration however is slow — Pulse 84 and soft — No mucous sputa — Bowels were moved last night — Still shows signs of narcotism — Ordered to day Blue Mass grs ij every 2 hours — Mustard plasters to be applied to inside of his arms, to his feet, ankles and abdomen — 6 Oc P.M. condition about the same — Can retain nothing in his stomach — Ordered an enema of Flax seed tea — Blister 6 inches by 5 to be put on right breast under the clavicle — Sept. 6th Pulse 104 — Respiration slow — Stomach exclusively irritable, every thing taken being thrown up — Tongue cleaner than it was yesterday — Had an injection last night, which moved his bowels freely — Previous treatment ordered to be continued.

Sept 7th Pulse 96 — Respiration 24 — Still has tenderness over the epigastrium — Can keep nothing in his stomach. Was somewhat delirious last night — Bowels moved regularly — Seems now to suffer altogether from the disordered condition of his stomach — Ordered following ℞ Emul: Acacia: ℥ii
Hydrocyanic Acid: gtt xii
Aqua ℥iv; M — Dose table spoonful every 2 hours until his stomach is quiet; after which resume the Blue Mass — Also a blister 6 inches by 6 over the epigastrium — Sept 7th 6 P.M. Irritability of stomach continues — Sept. 8th, Pulse 96 — Respiration 24 — Gastric symptoms a little better — Ordered Creasote gtt. i to relieve the hiccough — Also give the following ℞ Blue Mass: grs ij every 4 hours — Sept. 9th
Opium gr. ⅛ Condition better to day — There was some vomiting yesterday, but none this morning — Tongue red — Previous ordered to be continued — Sept. 10th seems better to day — Though his pulse is too frequent 112 per min.

Has no vomiting to day — Blue Pills ordered to be stopped —

℞ Gum Acacia ℥ij } Dose table spoonful
Hydrocyanic Acid gtt xij } every 2 hours — Gum
Aqua ; ℥vj } water diet — 11 Oc. P.M.

Patient having attempted to rise from his bed about 6 Oc, fainted, and but feeble reaction took place afterwards — In spite of all efforts to restore him, he died about 11 Oc.

Post Mortem examination revealed the following — In the right lung there was red hepatization in the lower portion of the upper lobe not extending over more than a fourth of the lobe — Some Pleuritic adhesions were also present — On the stomach there was softening of almost the whole inner coat, with arborescent congestion — It was also filled with bile — Gall bladder very much distended and containing about a dozen calculi — Liver healthy. (11)

Case of Dysentery

Martin Connelly — Aged 23 years — Is a native of Ireland — Has been 5 years in the United States — Was admitted, as a patient, in the Baltimore Infirmary July the 30th 1857 — Is a Labourer by profession — Lives in Canton near Balt. — On Friday July 28th complained of pain in his back and abdomen — On the same day commenced passing blood mingled with mucus from his bowels, with straining while at stool — Had 5 or 6 evacuations of this character during the day — The same number and character of evacuations, have continued daily, up to the time of his admission into the Hospital — Took Castor Oil on Friday and Saturday nights previous to coming into the Infirmary, and had a sinapism applied to his abdomen — Saw a Physician, on Monday, who gave him some powders the nature of which he does not know — His condition when

admitted was as follows — July 30th Pulse 90 and soft — Tongue slightly furred and moist — Great tenderness and pain on pressure over the lower part of the abdomen — Has no head-ache — Skin dry but not hot — Has had since morning 3 or 4 evacuations from his bowels consisting of blood, mucus and serum — Thirst not very great — His pulse being compressible and not very full, only a small amount of blood was taken, not more than 4 or 5 ounces. Was ordered Calomel grs. x. Opium: grj. Ipeca grj. July 31st Patient says he feels better — Pulse 75 — Temperature of skin pleasant — Tongue furred — Still tenderness over abdomen — Had a good fecal evacuation this morning — Was ordered, if Dysenteric symptoms occur during the day, Calomel grs x. Opium grj: Ipecac grj to be repeated at night — This to be followed by Castor Oil ℥j if his bowels should not be moved in due time — Also venesection if there be rise of fever during the day — Cups to be applied

over the abdomen — If his bowels be moved too freely give Paregoric ʒj after each operation — Aug. 1st The symptoms not requiring it yesterday the prescription ordered was not given, but the patient complaining of great abdominal distress, cups were applied over the large intestines — Last night had frequent evacuations of blood and mucus from his bowels — Feels very weak this morning — Pulse 82 Epigastric tenderness continues — Temperature of skin natural — Tongue furred — Was given this morning Calomel grx. Opium grj Ipecac gri — To be followed in 8 hours, if no fecal evacuation occur, by an emulsion made as follows —

℞ Castor: Oil: ʒj
Spirit: Eyp: Nitri: ℥j
Aqua: Camphorae: ʒj
Gum: Acacia ʒj
Tinc: Opii ʒjss

Dose ℥ss every 2 hours until fecal evacuations occur, after which give Paregoric ʒj after each movement of the bowels except the first —

Aug. 2d Fleming had fecal evacuations yesterday

without the oil emulsion it was not given — Cork paregoric ℥j after each movement of his bowels — Pulse 75 — Still has pain and tenderness over the larger bowels — Has desire for cold drinks — Tongue furred and of a brownish colour — Skin natural — Forehead and temples bathed with perspiration — No blood with the evacuations to day they being rather fecal in character — Has no appetite — Sleep disturbed during the night by the frequent calls to stool — Complains of great weakness — Had a cupping this morning, applied over the sigmoid flexure of the colon — Was ordered, if the bowels be moved very frequently during the day, ℥ss of the Comp: Chalk Mixture after each movement — Otherwise paregoric to be continued as before directed — Aug. 3d. Patient says he feels better — It was not found necessary to give the Comp: Chalk: Mixture yesterday, the Paregoric being sufficient to meet the indications —

Bowels have been moved 8 times to day. Stools watery and mixed with flakes of matter resembling the washings of flesh. Pulse 75. Tongue not so much furred. Skin dry, but not abnormally hot. Pain and tenderness over the Colon continues. Slept tolerably well last night. Treatment of yesterday to be continued with the addition of the Oil emulsion if Dysenteric symptoms occur. Aug 4th Patient feels better. Bowels were not moved so frequently yesterday and last night as heretofore. The Oil emulsion was not indicated yesterday. Pulse 75. Skin natural. Tongue nearly clean. Has less abdominal distress. Had a watery evacuation this morning mixed with blood. Was ordered ℥ss of the Oil emulsion every 2 hours until fecal evacuations occur after which give Calomel as before directed. Aug 5th Patient is very weak this morning. Has great pain and tenderness over the abdomen, and straining

while at stool — Bowels were moved very often yesterday and last night, and 3 times this morning — Stools consisting of blood and dark coloured mucus while taking the Oil emulsion, but after that was suspended becoming lighter coloured and watery — Pulse this morning 76 and small — Tongue more furred than it was yesterday — Has no appetite — Face bathed in perspiration — Extremities cooler than natural — Oil emulsion to be continued to day until fecal stools occur, after which continue the Paregoric — Cups ordered to be applied over the sigmoid flexure of the Colon — Aug 6th Is better to day — Has very little pain — Pulse good — Tongue cleaning — Evacuations fecal — Bowels not moved so frequently as formerly — Temperature of skin good — Ordered Paregoric after each movement of the bowels — Aug 7th Patient is worse to day — Blood again with the stools — Pulse small and weak — Tongue not so clean

as it was yesterday — Bowels were moved twice last night and once this morning — much straining at stool, and tenderness, on pressure over the lower bowels — Skin cool — Has no appetite — some thirst — Oil emulsion and paregoric to be given as before directed — Aug 8th Feels about the same this morning — Has had since yesterday morning 5 or 6 evacuations — Those stools observed this morning were fecal — Paregoric ordered to be continued as before — If dysenteric symptoms occur continue Oil emulsion also — Pulse rather weak — Skin natural — Tongue little furred — No appetite — some thirst — Tenderness over the colon and straining at stool — Aug 9th Does not feel so well to day — Has had 3 or 4 evacuations since yesterday the last fecal and quite large — Pain and straining at stool more violent — Pulse weak — Tongue about the same as before — Rested badly last night — Abdominal tender

-ness continues — The following ordered —

℞ Creta. prep: ℥ij } Dose ℥ss after each move
Extr. Rhatany: ℥ij } ment of the Bowels —
Tinc. Opii: ℥j } Aug. 10th Patient feels much
Aqua: Camphorae: ℥vj } better this morning — Rested
tolerably well last night — Has had 3 fecal
evacuations since yesterday — Abdominal
tenderness less severe — Less pain and strain
ing at stool — Skin moist — Tongue seems
disposed to clean — Comp. Chalk Mixture
before directed ordered to be continued —
Aug 11th Says he does not feel so well
to day as yesterday — Abdominal tenderness
somewhat increased — Dysenteric stools have
returned — Pulse 72 — Tongue heavily furred —
Skin dry, and rather cool — Slept pretty
well last night — Aug 12th Feels some
better this morning — Has had 5 evacuations
during the last 24 hours — Still pain and
straining at stool — Pulse 72 and pretty firm
— Temperature of surface good — Tongue furred

in the middle, and clean upon the tip and edges — Rested well last night — Ordered following:

℞ Acetate: Lead: grs xviij } Made into 6 powders.
Pulv: Opii : grij } One to be given to Pa-
Creta: Prep: grs xxx } tient every 4 hours —

Milk-mixture with Rhubarb to be given after each movement of the bowels — Aug 13th Feels better to day — Has had only one movement of the bowels since yesterday morning, that being fecal — Pulse 76 — Skin moist — Tongue disposed to clean — Slept well last night — Ordered Dover's powder grs v/ every 6 hours — Aug 14th No great change in condition — Pulse 76 and compressible — Skin cool and moist — Tongue casts off its furr in flakes — Has had 2 Dysenteric stools during the past 24 hours — Has some Tormina and Tenesmus — Previous treatment ordered to be continued — Aug 15th says he feels better this morning, but the stools continue Dysenteric — Tormina and Tenesmus less severe — Bowels moved twice du

-ing past 24 hours — Slept well last night — Tongue nearly clean — Pulse natural — Skin cool and dry — General appearance is better — Continue previous treatment — Aug 16th Continues to improve — Slept well — Bowels moved 4 times since yesterday morning — Last stool was fecal — The others were slimy — Still has some abdominal pain and tenderness — Pulse 64 — Tongue clean and moist — Continue treat-ment — Aug, 17th Is still improving — Put on Chapman's Mixture ℥ss every 4 hours — Pulv. Dove -ri grs x to be given at night — Aug, 18th Still improving — Stools are more natural and less frequent — Tongue clean — Pulse natural — Temperature of surface pleasant — Appetite returning — Is gaining strength — Has very little abdominal distress — Has gained flesh and his general appearance is better — Slept comfortably last night — Ordered Decoction of Ger-anium Maculatum ℥j after each movement of the bowels — Chapman's Mixture continued —

Aug. 19th Continues to improve — Is stronger — Appetite improving — Slept well last night — Bowels moved twice yesterday and twice this morning — There was some Blood with the stools this morning — Has some straining at stool — Has very little tenderness over the Abdomen — Tongue nearly clean — Tongue and Skin natural — Continue treatment — Aug 20th Still improving — Bowels moved only twice since yesterday — Stools healthy in appearance — Has scarcely any Tormina or Tenesmus — Tongue clean — Pulse natural in Force and Frequency — Appetite increasing — Patient says he feels much better — Chapman's Mixture and the Decoc. Geranium Maculatum to be continued for a few days — Aug 21st Patient left the Infirmary to day convalescent

(11)

Case of Ophthalmia.

John Collins — aged 26 years — a Native of Scotland — Has been 6 years in America — Was admitted as a patient in the Balt. Infirmary — Aug 19th 1851 — Before coming to this country never suffered from disease of the eyes — Soon after his arrival in America had an attack of inflammation of his eyes which lasted for a month — Last winter again had sore eyes, but it was soon cured — In June last, while working in the Wing mill Tunnel, his eyes became inflamed for the 3d time — The right eye being affected first, and soon afterward the left — There was much Lachrymation and Photophobia — Never had Rheumatism or Gonorrhoea — Was attended by a physician who cupped and blistered him — Condition when admitted as follows — Pulse firm, much pain in temples — Left eye not

much inflamed, but watery and weak — Right eye very much inflamed, with an ulcer in the Cornea in front of the pupil — Much congestion of the sclerotic and conjunctival vessels — Mucous membrane of the lids very red — Was bled to the amount of ℥xij — Head cups applied to his temples — Was ordered the following medicine —

℞ Hydrg: Protochlor: grs.xij
Antimonial: Powder: ʒj
Nitrate: Potass: ʒss
} Made into 6 powders — one to be taken every 3 hours — Aug 25th Condition somewhat improved — The following was ordered —

℞ Vinum: Colchici: ʒiij
Sulph: Mag: ℥vj
Tart: Mag: ℥iij
Aquæ: ℥xxxx
} A table spoonful to be given ~~every~~ 3 times daily — also

℞ Argenti: Nitras: grs ij
Aquæ: ℥ijss
} A small quantity to be dropped into the eyes daily — Aug 25th Eyes much improved — Mercurial Powders ordered to be stopped

the gums being touched — The following was ordered — ℞ Vinum: Colchici: ℥ss } Large table
Aquæ: ℥vss } spoonful to
Carb: Mag: ℥ss } be given 3
Sulph: Mag: ℥vj M } times daily

Aug 26th Still more improvement visible to day — Sclerotic and conjunctival vessels much less injected — Cornea clearing up and the ulcer improving — Colchicum mixture and collyrium ordered to be continued —

Aug 27th Doing well — Collyrium of Nitrate of Silver ordered to be increased to the strength of gr ij to ℥j aquæ — The following mouth wash ordered for the Ptyalism —

℞ Zinc: Chlorid: ℥ss } To be used several
Creasote: gtt xij } times daily — Ulcers
Aquæ ℥vss M } on gums to be touch-

-ed with pure Muriatic Acid —

Aug 28th Continue treatment — Aug 29th Patient's eyes much improved — The following stimulating ointment ordered for his eyes —

℞ Hydrarg: Praecip. Rub: grx } A small piece
Prepared Lard: ℥ij } to be carefully rubbed
between the lids at bed time — Stop the
Colchicum Mixture — Aug 30th Continue previous
treatment — Aug 31st Patient still improving —
Sept 1st Ordered the following collyrium —
℞ Sulph: Zinci: grxiv } To be applied by means
Vinum: ℥iii. ℥ij } of a piece of muslin wet
Aqua: ℥iij } and laid over the eyes —
The patient was kept on mild diet, and
the above treatment persevered in for a
short time longer, when he left the Infir-
-mary well —

Case of Laryngitis

Patrick Divine — Aged 35 years — Native of Ireland — Has been 4 years in this country — Admitted as a patient in the Bellevue Infirmary Sept 5th 1857 — No satisfactory account of his case, previous to his admission, could be obtained — Was taken sick two or three weeks ago with Bilious fever, for which he took many powders and pills the nature of which he does not know — Condition when admitted as follows — Scarcely able to speak — Dyspnoea excessive — Tongue parched, swollen and covered with black patches —

Tonsils and uvula very much swollen — Throat very tender externally — Strong Mercurial fector detected in his breath, —

Nose pinched — Pulse 135 per min, — Respiration 52 — No physical signs of Pulmonary disease discoverable — Sept 8th Condition about the same — Was seen by Dr. Milton Bergen who ordered his throat to be painted with

a strong Sol, of Nitras: Argenti ℥j to Aquæ ℥j
Also a gargle of Alum to be used in Throat
rubbed with ammoniacal liniment externally—
If no relief be obtained, an emetic of
Ipecac grs xxv was ordered to be given —
The emetic being indicated, an attempt was
made to administer it but the patient
swallowed only half which produced no
good effect — & Pc, P.M. condition much worse —
Bowels were moved freely to day — Dyspnœa
increased — Loud mucous rattle in his throat —
Suffers greatly — Ordered Sulph: Zinci: grs xxv
at once — Also the following —

℞, Tartar Emetic: grs iv
Nitrate: Potass: grs xl viij
Aquæ ℥ iv M

Table spoonful
to be given every
2 hours — Continue
the internal application of Nitrate of Silver —
Sept: 9th Condition about the same — Was
seen by Dr. Shew who ordered another
Emetic of Sulph: Zinci at once — Tartar Emet
in mixture is to be continued — Sulph: Zinci

produced no good effect. Patient growing worse rapidly it was deemed expedient, by the attending physicians, to perform Tracheotomy as a dernier resort. The operation was accordingly performed by Dr. Mittenberger very skillfully, but was of no avail. The patient died notwithstanding the strenuous efforts made to relieve him, artificial respiration included. Post mortem examination revealed the following lesions. The larynx and epiglottis together with a portion of the pharynx were removed from the body, and found to be in an advanced stage of ulceration. The epiglottis was entirely denuded of its mucous membrane and so stiffened as to be incapable of closing the glottis. The other portions of the fauces were also ulcerated. No further examination was made, the above being considered sufficient to cause death.

An
Inaugural Dissertation
on
Rubeola,
Submitted to the Examination
of the
Provost, Regents, & Faculty of Physic,
of the
University of Maryland,
for the Degree of
Doctor in Medicine
by
Nathan S. Lincoln,
of
Massachusetts.

Rubeola

"Rubeola is a disease characterized by a crimson rash, appearing on the skin in irregular, and crescent-formed spots, accompanied with fever and catarrhal symptoms."

The history of this disease is extremely obscure. Until the ancients were acquainted with it, it is impossible now to determine. In England, France, and Italy for several centuries it was confounded with smallpox, scarlatina, & even with plague. The sagacious Sydenham considered it a variety of variola, but

he distinguished and described great differences between the two diseases, or as he believed, between the two forms of the same disease.

So late even as 1763, Sir Wm Watson held the same opinion; and it was not till the appearance of Dr. Withering's "Essay on Scarlet Fever," in 1793, that a correct diagnosis seems to have been made.

The initiatory fever in measles is generally very slight. There commonly exists an indisposition to any active exercise. If the patient is a child, he seems to have no inclination to engage in his accustomed sports; he is peevish & fretful. The appetite is impaired; and there is often sickness at the stomach. The tongue is furred, and the skin dry. On the second day head=

as he is common, accompanied with a sensation of stricture across the forehead, over the eyes. In fine we have the usual symptoms of fever, more or less marked. These febrile symptoms are sometimes ushered in by a chill. On the second or third day catarrhal symptoms appear. The mucous membrane of eyes, nose, fauces & larynx, become red, inflamed, and exceedingly irritable. The eyes are full, and running over, with scalding tears. There is frequent sneezing, and a hoarse cough, which is peculiar to this disease.

On the fourth day the characteristic eruption begins to make its appearance. It is first observed upon the forehead and temples, along the border of the hairy

scalp, and on the chin, in the form of small red spots, which soon coalesce, and form patches of an irregularly crescentic, and circular figure. These patches gradually become slightly elevated, and of a deeper red than at first; and in the midst of one of them can be seen small portions of white skin. Commencing at the parts above mentioned, the rash in the course of the first day of its appearance, spreads over the entire face, and may be perceived on the palate and fauces, of a dark red colour.

On the next day it extends over the neck, breast, and upper part of the trunk. The patches on the fauces become still more marked by their increased elevation, and

their dark livid hue. On the face the eruption is now very vivid; and the eyelids, and the neighboring parts of the face, become so swelled, as to render it impossible to open the eyes. On the sixth day the eruption reaches as far as the knees, and the patches upon the face have begun to fade.

On the Seventh day every part of the surface of the body has been visited; and on the eighth the rash has begun to fade upon those parts at which it has arrived.

On the ninth day it is scarcely visible, and on the 10th it has, in most cases, entirely disappeared.

In general the catarrhal symptoms become more severe on the appearance of the rash. But they keep pace with it in its departure.

A partial desquamation takes place after the disappearance of the rash, the cuticle peeling off in minute flakes or thin scales, where the red patches were situated.

Such is the course of Rubeola in the great majority of cases; but it is subject to several diversities. In epidemics of Measles we not unfrequently meet with cases, in which the fever, and catarrhal symptoms are entirely wanting. This variety of measles has received the appellations of "Rubeola spuriola" & of "Rubeola sine Catarrho." More often we have all the symptoms except the catarrhal. Again persons exposed to the tubercolous contagion, present all the symptoms of measles except the rash.

A malignant variety of measles also occurs; and in some epidemics a great number of the cases present low typhoid symptoms.

In one case typhous infection having been introduced into a school, in which measles were prevailing, a typhoid character was observed in all the succeeding cases of that disease.

Where the typhoid complication exists, the rash is often of a livid purplish hue; irregular in its appearance & distribution, and interspersed with petechiae.

Measles looks among those diseases which are considered most certainly contagious. Whether it ever exists without this origin it is perhaps impossible to ascertain. Their epidemic influence is ever

The exciting cause has never been discovered. Many even doubt its ever being a predisposing cause.

When it first appeared it is impossible to discover. It now constantly exists in all parts of the world.

It is often epidemic — most commonly so. It seems to remain so long in a place, as is necessary to infect all the inhabitants susceptible of its poison. It then leaves that place to return, as soon as a new supply of subjects have appeared.

Its contagious power, though well marked, is not so certain as that of small pox; nor yet so capricious as that of scarlatina. Except infants, and the very aged all seem about alike susceptible of this disease.

It has been asserted that adults are less liable to contract the disease than children. This is probably more apparent than real. The fact that most adults have had the disease in early life, renders it comparatively a rare disease after puberty.

Like most other contagious diseases, measles seldom attacks the same person more than once. Some authors deny that it ever occurs a second time. Numerous well authenticated instances of its second appearance, however, are on record. It may readily be admitted though, that these cases happen much more rarely in this disease than in small pox, or even than in scarlatina. Its period of incubation generally is about

nine or ten days; but it varies from five days to a fortnight. The diagnosis of measles is not commonly difficult. In its earlier stages it may sometimes be confounded with small pox or scarlatina; and tubercular catarrh may not always be easily distinguished from Roseola. If Roseola be epidemic, febrile & catarrhal symptoms, occurring in a person, who has never had measles, may be looked upon as pretty surely initiatory to this disease. But as these symptoms are often not well marked, and small pox is often epidemic at the same time with measles, the diagnosis should be guarded. The first appearance of the rash in the two diseases is very similar. One or two days, however,

will develope the characteristic differences. From scarlatina measles may be distinguished by the occurrence of catarrhal symptoms, ~~and~~, and the absence of the anginose affection, characteristic of the former disease.

In Scarlet fever the rash occurs on the second day, is of a brighter red colour, and more punctuated at first, but more uniform at last, the crescentic, & clustered arrangement of the tubercolous affection being absent.

The prognosis in most cases of measles is favorable In the great majority of cases. Rubeola is to be feared rather as a condition strongly predisposing to attacks of the very grave diseases of the respiratory organs,

than from the intensity of its own poison. The typhoid variety however is a very serious disease in itself. Extreme debility and restlessness; a dry dark tongue, deep redness of the fauces, and an irritable stomach, are very grave symptoms.

In common cases of measles careful nursing is indicated rather than much medicine. To protect the patient from the exciting causes of Pneumonia, and Bronchitis, should be our first care. He should be kept neither too hot nor too cold. In this we are to be guided in a great measure by the feelings of the patient himself. Just sufficient clothing

to keep him comfortable should be allowed. Sudden exposure to cold should be most carefully guarded against. The excessively irritable eyes should be protected from an excess of light. No noise or disturbance should be permitted. Very little food, and that of the mildest kind, should be given him. Mucilaginous drinks he may partake freely of. The inhalation of the vapour of warm water, or chamomile infusion is often very grateful. The burning and itching of the skin may be allayed by sponging with warm water. But the greatest care must be exercised in this application, lest the patient be exposed to the cold. The bowels

which are commonly constituted in this affection, should be kept open by mild aperients. Aqua ammonia is occasionally indicated. In cases of debility, and of a typhoid cast, tonics and gentle stimulants should be administered. Blood letting may in most cases be reserved for pulmonary complication.

Pneumonia and bronchitis must, when complicating measles, be energetically treated in the same way, as when occurring alone.

Before we consider the value of inoculation in this disease, its possibility must be made out.

An Inaugural Dissertation on Diseases of the Mind

submitted for the examination of the Provost, Regents, and Faculty of Physic, of the University of Maryland, for the Degree of Doctor of Medicine,

by

George Penigrin Knotts,

of

Baltimore City, Maryland.

1852.

It is almost a matter of impossibility, for a medical
student to advance any new idea, promulgate a new theo-
ry, fathom a new thought, or by his essays, (however learn
d they be) to throw any additional light on the complex
and intricate science of Medicine. Feeling strongly
this important truth pressed on my mind, I have com
menced this Thesis, (not with the expectation of enlight-
ening its readers, but, mainly, as an appreciation of that
portant statute, of the Faculty of Physic, of the Universi
of Maryland, which requires the candidate for the degree
Doctor in Medicine, to produce a written guarantee of
proficiency, in the study of Medicine. The subject of my
esis is complex, embracing some of the most disastrous dis
s, that humanity is heir to. My own thoughts, combin
with those of men, who have exerted their efforts to main
in theories and discoveries in Medicine.

Diseases of the mind.

n entering upon this subject, I feel as if I were tread-
g upon consecrated ground. I am aware of the great
ficulty, under which I labour, and the importance of the
bject. To touch with a delicate hand, the mighty machine-
of man's imagination; to reveal the workings of the mind
God's chosen work, requires mightier efforts, than I can make.
he Understanding, the Memory, passion, imagination, will,
moral faculty, sense of the Deity, conscience and prin
ples of faith, are the faculties of the mind. Its operations
complicated, embracing ratiocination, judgement, per-
tive qualities, volition &c. The influence of Mental emotion
on the physical system, is of itself a prolific subject, with
endless variety of subdivision. The health of man, is un-
the direct control of his will. He but moves, acts, aye,
s, through the many-emotions to which he is heir. As the
derstanding, occupies the first in the classification of the

Diseases of the mind.

In entering upon this subject, I feel as if I were treading upon consecrated ground. I am aware of the great difficulty, under which I labour, and the importance of the subject. To touch with a delicate hand, the mighty machinery of man's imagination; to reveal the workings of the mind of God's chosen work, requires mightier efforts, than I can make. The Understanding, the Memory, passion, imagination, will, the moral faculty, sense of the Deity, conscience and principles of faith, are the faculties of the mind. Its operations are complicated, embracing ratiocination, judgement, perceptive qualities, volition &c. The influence of Mental emotion upon the physical system, is of itself, a prolific subject, with an endless variety of subdivision. The health of man, is under the direct control of his will. He but moves, acts, aye, lives, through the many-emotions to which he is heir. As the Understanding, occupies the first in the classification of the

faculties, and also the highest rank, I shall treat of the derangement of that important faculty, upon whose perfect function, depends almost entirely, the proper performance of the rest of the faculties. Many are the theories urged by writers. Each author, has had his favorite doctrine, upon whose beauties, he has descanted, and whose merits, he has urged, untill theory, clashes with theory, in the minds of those who have them their study made.

Some intelligent writers urge the doctrine, that madness is said to be the effect of disease of the Spleen. This viscus, is supposed to be affected in that supposed state of madness, known as "Hypochondriasis." This might at first, seem a very plausible idea, and one deserving of consideration and thought. Yet, when we consider that the derangement of the Minds, depends, not on any vitiated secretion contained in the Spleen, this idea must fall.

Again, it is set forth by a French Writer, Mr. Prost, that

"madness, is the effect of a disease in the intestines, and particularly of their peritoneal coat." The marks of the high state of inflammation, found in this, as well as other organs, would appear to favor this theory; but these morbid appearances, are the effects, not the causes of disease, as they are found in Liver, and occasionally the Stomach, of those who have died with madness. They are induced by the violent, or protracted exercise of the mind, causing the viscera to absorb, or attract the excitement, thereby, leaving them in that state of debility, which naturally disposes them to inflammation and obstruction. Again, it has been said, that madness is the effect of diseases of the nervous system. Of this, no direct proof can be had, for autopsies, and dissections, prove on the contrary, that the nerves are in a sound state.

It is of no use to produce any further theory, or opinion, but in the language of the learned Dr Rush, give what seems to me to be, the correct theory of intellectual

derangement. He says, he believes "the cause of madness is seated primarily in the blood vessels of the brain, and that it depends upon the same kinds of morbid and irregular actions, that constitute other arterial diseases. The reasons are drawn, 1st From its remote and exciting causes, many of which, are the same with those, which induce fever, and certain diseases of the brain, particularly, Apoplexy, Phrenitis, Palsy and Epilepsy; all of which, are admitted to have their seats, in a greater or less degree in the blood vessels.

2nd From the ages and constitutions of persons, who are most subject to madness. The former, are in those years, in which, acute and inflammatory arterial diseases usually affect the body, and the latter in those who labour under the arterial predisposition."

Now, I also infer, that madness is in the blood vessels, 1st From its symptoms, viz. a sense of fulness and often severe pain, in the head; wakefulness; redness of the

ers such as precedes fever; a whitish tongue; dry, or moist skin; urine high colored; pulse frequent, tense or full, or a morbidly slow pulse. These states of the pulse, occur uniformly in recent madness, and frequency, is seldom absent in the chronic state.

2nd. From its alternating with several diseases, which are undoubtedly seated in the blood vessels. These are Phthisis Pulmonalis, Rheumatism, Intermittent and Puerperal fever and Dropsy; many of which, are continually found in the records of Medicine. It is sometimes discovered, blending its symptoms with the different forms of fevers. It is sometimes, as regularly periodic as Intermittent or Remittent fever. Again, it frequently appears in a Typhoid form, in which, it is attended with coldness, feeble pulse, muttering delirium, an involuntary discharge of the secretions from the Rectum and Bladder. This, is more particularly, the case, in

great weakness and debility.

I again infer that the disease is in the blood vessels, from the appearance of blood after it has been drawn in a state of madness. It presents the same appearance, as blood drawn during inflammatory fever, Buffy coat, Yellowness, Quantity, of Serum. Also, from the appearances of the brain after death, from madness. They are nearly the same, as those of Phrenitis, Apoplexy, and other primary affections of the brain.

Lastly, I take it, that madness is situated in the blood vessels of the brain, from the remedies which most certainly, and speedily, cure it, being the same as are in use as curative means for other diseases of the blood vessels in that and in other parts of the body.

Having thus hurriedly summed up the different reasons, why it is my opinion, that madness, or aberration of the functions of the Understanding, is situa-

-bde primarily in the third vessels of the brain. I propose in a brief manner, to trace out the predispositions of the diseases, to show why madness supervenes upon the prevalence of any one particular emotion.

I shall divide them 1st, Into such as act directly upon the body: 2nd, Into such as act indirectly upon the body, through the mind.

Those which act directly upon the body, are, certain local disorders, induced by enlargement of the bone, tumours, abscesses, and water on the brain: certain diseases of the brain, particularly Epilepsy, Apoplexy, Palsy, Vertigo, and Headache. These last however, seldom cause it. Certain odours, emanating from certain locations; excessive use of ardent spirits; sudden abstraction of stimulus; inordinate sexual desires, are very frequently, causes of mental derangement.

Those which act indirectly, on the body, through

the mind. Intense study is a most frequent cause. Study, whether of science, or of the mechanical arts, of real, or imaginary, knowledge, composes a terrible quota in the lists of madness. Now, it seems to me, that imaginary knowledge, is far more dangerous as a close point of study, than real knowledge. For instance, the Monomaniac, upon the branch of discovery, of the mee so fatal delusions, the "Philosphers stone"; the method of obtaining perpetual motion: the project for the restoration of Patriarchal rights and privileges, and of the consequent establishment of perfect order, throughout the world: or the still more fallacious idea, to move prophecies (never made, except in their own deluded minds) contended by them, to be found in the Holy Bible, ee more irrecoverable; than they, who merely overcharge the mind with intense study of a real nature.

Again, the rapid transitions of thought, from one

subject to another, is dangerous. We feel this more fully, after reading a series of Reviews, Pamphlets, Magazines, &c. when the mind is debilitated and enfeebled, that it is some time before we can recover, as it were, the tone of the mind. Light and trifling reading, often so distracts the imagination, as to be a very prolific source of disease.

Again, it is brought on by impressions that act primarily on the heart, Joy, Grief and all the various passions belonging to man. Joy, as well as the other, passions, prove injurious often.

Having concluded what I have to say of the Derangement of the Understanding, I shall take up another form of disease of the mind, Derangement of the Memory.

This is a most lamentable disease. In it, persons forget their dearest and best friends. Things, that

are as familiar as household words, suddenly become as newly acquired things. The studies of years, are entirely, obliterated. Many who are acquainted with all scientific knowledge, and speak the language of every nation as if it were their vernacular dialect, suddenly are as ignorant as mutes, and can scarce stammer through a sentence. Memory once dethroned, her place is too often filled by perfect idiocy.

Names, substances, sounds, vocables of all kinds, quantity, quality, and in short, almost every thing, is obliterated from the minds of the diseased one, and he becomes a pitiable wreck, on the shores of misery. What a deplorable state! A man, in whom all the knowledge he can possibly, have, is concentrated, a most excellent scholar, and profound statesman, is in a short time, by the decrees of Fate, transformed to the condition of an automaton.

The causes of this sad change are various. What are they? "Intemperance, either in eating or drinking," the notorious

tells us "may cause it." Fevers, particular, those of a malignant character. Instances have been known, where, after fevers of this kind, intelligent men, have forgotten their alphabet.

All diseases of the brain are predisposing causes of this disease.

These are a few of the corporeal causes. The mental causes, are, Grief, Terror, the oppressing of the memory with words and studies, disproportionate to its strength, cessation from study, neglecting to exercise the memory, and various causes of a similar nature.

What are the remedies for this terrible form of disease? How can we treat it? Surely, it will require persuasive, as well as medical measures. The removal of the exciting, whatever it may be, if possible, is the chief resort. Mr Pope, advises strongly, exercises of any active kind, especially a fine trotting horse. Depletion is often useful. Rest of the mind. Cold Bath, and cold weather.

By the mental treatment, the frequent repetition of the names and things wished to be recollected. The memory is improved by thus using it. Various means are used for this purpose. By some, two or three persons are frequently called on, to assist the patient in the retention of his ideas.

Briefly, passing on, and leaving the subject of Derangement of the Memory, so hastily, and imperfectly sketched, I pass on to consider, Derangement of the Passions.

This not only weighs down the man, and unfits him for the pleasures and the toils of the day, but in its train follow devastation and death.

Health, which at other times, is in a good condition; under the influence of grief, becomes deranged. The whole system undergoes a change. A morbific action is set up; weakness of the digestive and nutritive organs takes place; symptoms of a typhoid state set in; a general lassitude

pervades the system, followed eventually by all the types of continued fever, and the patient, is hurried "to that bourne, from which no traveller returns." Typhoid Fever is not the only follower of Grief.

Phthisis, the insidious, yet more certain destroyer of Life, and Cancerous affections, are its followers. We see its workings daily. Many, who from constant and uncontrollable sorrow, have for weeks, refused to take the nourishment, or exercise provided for man, by an All-wise and overruling Providence, and ejected every thing, by which their physical system were sustained, have found too late, that Consumption, has marked them for its victims. In vain are the varying nostrums and patent medicines, invented by quacks, and sustained by the ignorant and designing, expended upon them. Medical skill is rendered unavailing. Daily, their natures are changed. Tuberculous deposits take

place in the lungs, bronchial respiration is changed, and the whole sad series of symptoms occur, untill Death wind's up the tragedy.

Anxiety is also another passion that is deranged. This, often, produces that most dreaded disease, Cancer.

Anger, is of itself, often a cause of disease; in fact it is a malady alone. When it predominates, it appears in a preternatural determination of blood to the head, a turgescence of the blood-vessels of the face, a redness of the eyes, an increased secretion of saliva, which is discharged by foaming at the mouth, great volubility, or total suppression of speech. After a time, bleeding at the nose appears, and if a woman be the patient, hysteria takes place, followed by Cholera, and oftentimes Death.

This is of course, an extreme case of Anger, yet may it not happen continually? What is to prevent it?

Dread not Anger upon some persons, have the effect of transforming them into tremors, for the time being; and may not produce an alteration of the general habit. Thus, this disease appears in a periodical form. It also appears, at times, with paleness, tremors, sickness in the stomach, vomiting, syncope and death.

This effect is noticed, more particularly, when the Anger is combined with Fear. When, although in an intemperate mood, the principle of Fear naturally affect the nature. Many, it is observed that great prostration of the muscular and nervous systems takes place, rendering for a period, the subject of it a weak and helpless man.

The remedies for Fear are, Physical, Rational and Moral. They are so common, that it is useless to describe them.

Grief is also a predisposing cause of Madness.

I shall now, after having treated of a few of the results of Derangement of the Passions, and alluded to the treatment in a slight manner, speak of a disease of the intellect, viz Idiocy.

By this term, we mean the absence, or rather the deficiency of intellect, a deficiency, often amounting to such a degree, as to totally disqualify an individual, for the common offices of Life.

This deficiency of intellect, does not refer to the want of external senses. As a proof, the most confirmed Idiot, can often see, hear, feel, smell and taste the same as any one else. There are many, who can tell the colour, or quality of articles. Again, may have an excellent idea of Music, and yet for all that may be completely fools. Some, can calculate, while in others this faculty, is entirely wanting. There are them, who can perform the necessary offices of life, such

as defecation &c with the greatest regularity and order.

The varieties are almost unlimited; from an inane moving being, who lies as a brute, and can exert no control over his voluntary, or involuntary organs, and who evacuates the Rectum and Bladder, without any knowledge of the fact, to the one, who is merely called an Imbecile, or as the Irish terms it "Soft".

Yet, amid the countless varieties, the prominent signature is discoverable.

The predominant feature is variable; in some, these are 1, in some 2 and in others dwindle to excess.

Vision, is most generally combined with other deficiencies. Nothing, an absence of some of what are called "Knowing qualities", will not constitute idiocy, yet a great deficiency of one, is almost always complicated with a less. For instance, a great degree of

monstrosity in birth, is generally combined with a minor one. If we see a palsy born without a foot, we often see a double portion of fingers or toes.

This it is not that Idiots often have a portion of the thinking faculty predominant, and another deficient.

As to the moral qualities, there are some, who are very harmless, and perfectly innocent as regards their claims, and are as docile as lambs; and others, who are as wrong and devilish, as if they were possessed with demons; rendering them, under the control of their voluntary passions, as dangerous as possible. They are capable of committing the most excessive outrage; murder is performed with ease, by them while in this state. They will steal, lie, and be guilty of many such actions. They are often gloomy and low-spirited, and if aroused, will take summary vengeance on the un-

happy object of their hate

They again, will imitate every action they see. The powers it seems, are concentrated in a desire, and that, to have the imitative propensities of the Monkey tribe. They will perform all manner of curious things. They will bleed, if they see the surgeon bleed; mix medicines as the Apothecary; bake food as the Cook; in short, do every thing but injure themselves, proving how degraded man may become in a state of idiocy.

It has been found after death, that the brain is of a deficient quality, and the whole generally small. However, Idiotism may be produced without a defect of the quantity of the brain. There may be enough of it, but it may be of bad material.

There are many, who are born Idiots, and yet, after a certain age, they in some degree, have their intellects

restored, so that they become quite sensible, and are able
make quite a decent attempt at getting through the
world, which it must be conceded by all, is much bet-
ter than complete Idiocy during Life.

But Idiots {those in whom the disease is congen
tal} seldom live to an advanced age. The age of
Thirty or Forty, is generally the maximum, to which
their lives are extended.

The defective power, according to Elliotson,
which causes the brain to be in such a state, is gener-
ally connected with such a want of energy, throughout
the whole body, that the patient seldom lives beyond
Forty years, and the greater the Idiocy, cæteris paribus,
the shorter time he lives.

Idiocy may come on in after life, from
various causes; for instance, blows inflicted on, or near
the region of the head, will cause derangement of all

the faculties of the mind. A direct blow, will sometimes so act, as to produce incurable idiocy. Softening of the anterior lobes of the brain; pressure; or any thing causing obstruction of the function, will all produce the disease.

There is a form of disease met with in the valley of the Alps, called Cretinism. Through all the paths, valleys and roads of Switzerland, in fact wherever travelling is found in that Country, there the unhappy objects of distress and commiseration are seen. The exhalations of the Earth, and stagnant waters, engender the disease. The water is bad, and the people so ignorant, that they prefer their unhappy lot, to a little trouble to procure water that is good, though there is plenty of it to be had. They are most miserable objects to meet with. With preternaturally enlarged heads, upon minute dwarfish bodies, they look like

inhabitants of another world. Their features are shrivelled up, they look like autumnal leaves, they are yellow and decayed, nose resembling "ace of spades". Mouth wide and gaping, with a continual ghastly grin. Muscles flabby and soft; thick lips; and dull; altogether presenting a most repulsive sight.

These poor creatures after death, are found to have the skull very thick, and frequently to have a quantity of water in the head. The tongue is often hypertrophied; too large for their large mouths.

Omitted to mention a predominant characteristic of this unhappy people, the Goitre - an enlargement of the Thyroid Gland.

These people get, live among themselves, are married, and have progenies, the same as other people. They are noted more as a natural curiosity, than as a pathological state, for it is not likely we will.

meet with many cases of it with us.

It has been said, that if two persons having Bronchocele marry, their offspring will have the Goitre, and this Goitrous person marry, one with Bronchocele, the 3rd generation, will be possessed with Idiocy. This, mere is an assertion, whether it is substantiated or not, a matter of surmise.

Now, having a view of Idiocy in its various forms, what prognosis shall we make?

If there is an absolute want of sense; if upon a close examination of a patient, we find no traces at all Intelligence, our prognosis of course, must be unfavorable. There is little hope of his growing to be like other people. If it is congenital, and so unfavorable, Schoolmasters may flog, Preachers may argue, and Physicians may prescribe; all the various forms of science and research may be expended on him, but all in vain. He

is incurable. Time and money lavished on him, will be all to no purpose. He is a confirmed idiot.

Yet, in many other cases, we can give a more favorable prognosis. If the disease is not so well defined; if there is any trace at all of mental properties, we may prognosticate favorably.

As to the treatment, all that can be done, is, to put the patient in as pleasant and healthful circumstances as possible, to feed him well, give him fresh air, and improve his body altogether, while we cultivate particularly those parts of mind, which are best developed. He may gradually, thus regain some one or other of his faculties, rendering him a little more useful to himself and others. This is an important point to be gained, for we should endeavor to render him useful to the world.

Insanity is not more dreaded than it ought to be. It constitutes a most alarming list of deaths, in

the various hospitals, into which its victims are admitted. It is singular, how differently, it affects different minds. Are they ambitious? They imagine themselves Kings, or Noblemen, and demand homage and respect.

Are they avaricious, or mean? They fancy their wealth is incalculable.

Are they ferocious, or malicious? They assume the nature of wild beasts, and have to have placed over them Keepers, who are often required to correct them.

Are they sensual, or slovenly in their dress, and conversation? They discover marks of both, in their appearance and demeanor.

Are they pious and benevolent? They are inoffensive in their deportment, and spend much time in spiritual exercises.

Has the disease been induced by the ingratitude, or treachery of friends, by the perfidy of those, they

trusted in, or by the unjust slander and calumny of the world? Their conversation shows distrust, and hatred of the world, and they exhibit coldness in general to every thing, and especially to the human race; to whom they feel they owe a debt of revenge, to be paid at some future time, if they are permitted to mingle again among mankind. In this state of mind, they suffer terribly, and frequently in a corner of their dungeon, shrink miserable from the supposed tyrannical monster-Man.

Is it induced by misfortune in business, or by the cruelty and rapacity of a creditor? They see in every man, a Sheriff or his deputy, and their continual conversation is of the horrors of a jail, and the lengthening of their lives in their dreary walls. They are constantly tormented with fears, their friends in their disordered minds, are their worst

enemies.

Is insanity induced by remorse for real or imaginary crimes? They imagine they are suffering for their misdeeds.

Is it brought on by a sudden, and an unexpected acquisition of wealth? They are the lively maniacs, singing and laughing all the time.

Insanity was quite a favorite theme for the immortal Shakespeare to descant on. King Lear, Hamlet, Macbeth and a host of others, have all suffered with this disease.

The last form of Derangement of the Mind is that, known as Monomania.

This disease is shown also in various forms. It is the most common kind of insanity. We meet daily, many, who are perfectly rational to all appearances, yet after a time, we find the disease

developing itself in some form.

There are some, who believe that they possess within themselves, the powers of divination and prophecy, and will continually intrude these opinions on the public. Again, some in following their different professions, imagine that they are invested with peculiar qualifications to transact their business. Some, who follow after money, untill their very natures are changed, will exhibit this kind of Monomania.

There are some, who have believed, they had the power of moving the planetary system at will, regulating the tides, influencing the phases of the Moon, preventing the winds from blowing too roughly, or else moving them on to storms. They think also they have power to form the Zephyr, or produce the tornado, believing every thing, is subordinate to their will.

Many, who upon the subject of Religion, are deranged, are

ational, upon every other point. They are found in
ery religious denomination, adhering to their notions,
ith the utmost tenacity, thinking every body fools,
ut themselves. It is shown in various forms.

Some take a particular text of Scripture, and
pervert the meaning of it, that it is made in
eir minds, a thing of mighty import. The various
cts of those, who follow after some Prophet, or
int in this World, believing that unless they do
, they will have no peace hereafter, are good repre-
ntatives of this Mania. Some, believing that the
orld is to be destroyed at a certain time, destroy their
roperty, give up their business, and publish to the
orld, that they are followers of some one, as deluded
s they themselves are.

In the Medical world, we are not exempt from
it. Some intelligent writers, upon some particular

ubjects, are so unreasonably urgent in their demands
r belief in them, as to lead to strong doubts, as to their
anity. They will write, and publish work after work;
lume upon volume, upon these themes, untill the
orld is perfectly disgusted with their vain efforts to
how, that they are the wisest persons in creation.

Some Physicians even, exhibit this passion per-
erted. They adopt in the diagnosis of disease, one set
f symptoms, with avidity, and with equal ardour,
ject another. Some Auscultate altogether, believing,
hat percussing the chest is ridiculous. Others percuss,
ooking at idea of listening to a man's chest, as they term
t. Some adopt one mode of practice, exhibiting
a class of remedial agents, and rejecting the ballance
f the Pharmacopea as useless. For instance, the class
of Monomaniacs, known as Homeopathists, Hy-
dropathists, Thomsonians, and others of a like

haracter, who continually are gulling and deceiving
e people, with their tricks, and constantly practising
eir vile absurdities, upon a credulous community. This
ass is more to be detested than any other.

I have now concluded all I have to say upon
iseases of the Mind. I have given my own ideas, min-
led with those of known celebrity, thinking, that
heir ideas, would be far superior to my own. I have
etailed although very scantily, it is true, the different
orms of Mania, the symptoms of the diseases, the treatment
. I have endeavored to arrange them with as much
egularity as it was possible for me. And I now sub-
it the whole to your kind consideration, beleiving, that
ou will reject all that is worthless, and if any thing
an be found worthy of notice you will treat it
ainrally.

George P. Knotts.

An

Inaugural Dissertation

on

Apoplexy

Submitted to the examination of the

Provost, Regents, and Faculty of Physic

of the

University of Maryland

for the degree

of

Doctor of Medicine

by

John Richard Hunter

of

Maryland.

Apoplexy.

Apoplexy may be defined a sudden loss or suspension of the animal functions, with a slow and full pulse, difficult breathing; generally attended with stertor; whilst the organic functions continue with little or no appreciable disturbance.

Symptoms.

In some instances, the apoplectic attack occurs suddenly, without any precursory indications of its approach. Yet, however numerous symptoms marking cerebral disorder, herald the attack; of which the most common are as follows: vertigo; a dull deep seated pain or sense of weight in the head, particularly on stooping; a turgid condition of the veins of the head and neck; throbbing of the temporal arteries; ringing in the ears; defective articulation; impaired vision and hearing; sparks and flashes of light before the eyes; bleeding of the nose; ste-

2

por; mental disorder; unused by incoherent talking; irregular spasmodic contraction of the muscles of the face, and a general stupefaction both of body and mind. In short the symptoms which mark the approach of an apoplectic attack, manifest an unusual determination of blood to the head.

The duration of these symptoms is very various; in some cases occurring only a few hours before the attack; in others, they are present with occasional remissions or intermissions for several weeks or months and even years.

In some the attack comes comes on by a sudden deprivation of the powers of sense and ~~and~~ motion; the patient falling almost immediately into a state of deep stupor; from which all efforts to arouse him in the slightest degree prove abortive. This mode of attack usually proves fatal in a few hours, sometimes in less than an hour.

In other cases the patient is seized with sudden deep

seated pain in the head; tremor of the extremities, confusion of ideas; nausea or vomiting and vertigo; becoming insensible he sinks down as from syncope; in a short time however he so far recovers as to converse and perhaps to walk about; still complaining of pain in the head, with confusion of the mind and giddiness. After the lapse of a short time, the brain becomes more and more oppressed, until finally the patient falls into a state of profound coma.

Sometimes hemiplegia occurs, with pain in the head, mental disorder; and vertigo; consciousness remaining. Soon great oppression of the brain ensues, with profound apoplectic stupor.

In whatever way the attack comes on the following phenomena attend its course. Immediately after the accession of the fit; the pulse and respiration becomes weak and scarcely perceptible. Both however soon

after, the pulse becoming full, slow and hard; and the respiration irregular and deeply sonorous. In violent cases we have expiration marked with a puffing action of the lips and frothy saliva is ejected from the lips with a spattering noise. The face is livid and of a turgid and bloated appearance the pupils generally being much dilated.

The extremities of the body are cold, whilst the skin about the trunk and head is warm. The jaws are either spasmodically closed or widely extended. Deglutition is sometimes abolished generally however the patient is enabled to swallow small portions of fluids. Torpidity of the bowels usually obtains and their evacuation is attended with much difficulty.

If the disease does not end fatally, it may terminate 1, In the complete re establishment of healthy functional action, and the continued enjoyment of good health.

This desirable end may be expected, when the various affected organs gradually resume their wonted action. The tongue usually first returns to duty, next the muscles of the superior extremities, then those of the inferior, lastly those of the face. Such recoveries in their progress are noted by free diaphoresis or diarrhoea; and occasionally by haemorrhages from different organs.

2. In partial paralysis, it being the most common termination of the disease. In some cases the muscles regain their former power; in others they slowly resume a certain degree of action, not perfect in its character.

3. Occasionally after the cerebral oppression has somewhat subsided, we have a general febrile condition resulting, assumeing either a high or low grade. Under a properly adapted treatment recovery may be anticipated.

Diagnosis.

Usually little difficulty is encountered in distinguishing this disease. The sudden loss of consciousness of the sensorial functions and of voluntary motion with the slow, full, pulse, and strong respiration, identify the apoplectic condition. From Syncope and Asphyxia, Apoplexy is distinguished by the abolition or almost imperceptible action of the pulse and respiration in the two first named affections.

There is likelyhood of confounding deep intoxication with apoplexy; the habits of the patient with the alcoholic odour of the breath, will lead in such a case to a correct diagnosis.

Prognosis.

Apoplexy is a disease of the most dangerous character: When it occurs with marked intensity, the sensorial functions being abolished, respiration deeply sonorous, the saliva sputtered from the lips, the pupils resisting motion

with an entire inability to swallow, death may reasonably be expected to occur. If however prompt and prudent treatment be instituted even in the gravest form of the disease; the results will in some, if not many cases prove favourable to recovery.

The duration in general terms, may be from a few minutes to two or three days. Death usually occurs in the second or third hour from the attack, when such attack is violent; not unfrequently however several days elapse between the seizure and the fatal result. The cause of the seizure has much influence over the prognosis; so also has the existence or nonexistence of that peculiar build of body, which predisposes to the affection.

When there is only a partial abolition of sensibility, as when the pupils contract under the ordinary stimulus, and when the patient can swallow, when the breathing is more regular, without stertor, particularly when a copious

effusion of blood occurs from the nasal or haemorrhoidal vessels, or diarrhœa is set up, then can a more happy issue be anticipated.

If the disease occurs from the rupture of a vessel, with extravasation of blood into the substance of the brain, great danger is to be apprehended; yet on the other hand the absorption of the coagulum of blood by nature's effort has been often, and is, often accomplished, and hence hopes of ultimate recovery may be reasonably indulged.

Causes.

The causes of Apoplexy may be divided into predisposing and exciting.

The principles of the predisposing are:

First, a peculiar build of the body; consisting in a large head; thick, short neck; broad Shoulders; full chest; florid and full face; short stature; with a plethoric and fatty tendency. Persons having this conformation of body;

are often subject to bleeding from the nose, and to sensations of weight and tension in the head, most usually on making violent exertion of the body, and when straining.

I know no better cause to attribute the hereditary predisposition to apoplexy, which characterizes some families than this peculiar conformation of body.

Second, Age. Statistical information points out the interim between the fortieth and sixtieth years of age as the period in which the complaint most usually occurs. The enfeebled condition of the vascular system which obtains in age would seem to answer for this predisposition; again in females the well known tendency to plethora at the turn of life, renders them more liable to the affection and strengthens the conclusion that this is the period in which the affection most frequently makes its advent.

Third, Whatever induces a preternatural determination of blood to the head. As a sumptous and stimulating

diet, enhanced by a sedentary life; Under this head may be mentioned a sudden change from a active mind to one of comparative indolence; intense and protracted mental application, immoderate venereal indulgences, at an advanced age particularly, and the inordinate use of strong coffee.

Fourth, Various organic diseases, as aneurism of the aorta; hypertrophy of the heart; visceral indurations; and tumours about the neck.

The exciting causes are very numerous. By the exciting causes I mean whatever induces an inordinate flow of blood to the head, or hinders its free return to the heart. A forced distension of the Stomach by immoderate eating, more particularly if the aliment is stimulant and difficult of digestion, with coexisting weakness of the digestive organs, is one of the most usual, and powerful exciting causes of Apoplexy. Intemperance in the use of ardent spirits,

violent exertions in lifting; great straining in defecation; vehement declamation; excessive laughter; singing; and playing on wind instruments, by causing determination of blood to the head may set up the disease. Exposure to the intense heat of the sun in warm climates, may produce that affection, ordinarily styled stroke of the sun; which I presume to be identical with apoplexy. Vehement and sudden mental excitement, rage, excessive joy, terror and deep sorrow are enrolled as occasional causes of the disease. The sudden suppression of habitual discharges, such as those occurring from chronic ulcers, epistaxis, and haemorrhoidal discharges; by damming up the channels through which nature's conservative effort to eliminate redundant matters from the economy is precluded, greatly conduces to the development of the disease. Neglect of customary venesection in persons of plethoric habits is mentioned as a cause. Translation of gout, rheumatism, erysipelas and exanthe=

-matous diseases are said to give rise to it.

Gastro-intestinal irritation is also named as an exciting cause, and from the known sympathy of the head with the stomach and intestines one would deem it likely.

In addition to these causes we have another set, equally efficient, namely those which impede the free return of blood from the head to the heart. So long continued stooping or other attitudes impeding the free return of venous blood from the head, the wearing of tight cravats or any strictures imposed upon the parts about the neck; any impediment to the free passage of blood into the lungs, or organic cardiac disease.

Authors have also named in the category of causes, excessive hæmorrhages; from the peculiar conditions obtaining in persons dying from such hæmorrhages.

The action of narcotic poisons, by producing strong vascular congestion in the head, ~~are~~ is also ranked with

the exciting causes.

Pathology.

The characteristic conditions that appear in apoplexy; such as abolition of sense and voluntary motion, are attributed to direct pressure upon the substance of the brain. The question naturally arises, how is the pressure in this case produced? And for an answer, cite the conditions displayed by post mortem examinations; which examinations prove beyond doubt the primary or essential condition to be, the extreme vascular engorgement of the brain. Following this secondarily, we have from such turgidity of the vessels rupture of one or more of them occurring and extravasation of blood ending in the production of a coagulum; if however rupture does not take place, we have here as in other parts similarly engorged, a spontaneous effort of nature to remove the abnormal state, by a serous effusion through the walls of such vessels. From the exercise of an ordin-

my amount of reason on would in me, that if the arterial conveyed blood in profusion or surplus to an organ, and such surplus could not be adequately removed by the veins, that vascular engorgement was certainly the pathological state existing; and that such vascular engorgement is adequate to the production of the peculiar symptoms of apoplexy, seems unquestionable.

On examining the brains of persons dying of apoplexy there is found in most cases, a deep red tint overspreading certain portions of the structure, thus so much engorged as to render very prominent the smaller vessels, and on slicing the brain numerous red spots are observed; all attributable to vascular turgescence.

Extravasation of blood into the cerebral mass generally occurs, it being an exceedingly rare occurrence in the cerebellum. Serous effusion in the ventricles or upon the surface of the brain frequently occurs.

Extravasation of blood into one hemisphere of the brain produces paralysis on the opposite side of the body. When the paralysis is general it is said extravasation takes place into the substance of the brain and bursts from thence and spreads along the base of the skull.

Treatment.

The great indication in the treatment of Apoplexy is to remove the cerebral engorgement; which is to be accomplished by an efficient reduction of the quantity and circulating force of the blood in the system; by effecting the removal of the causes exciting the determination of blood to the head; and by revulsive means driving, and by counter-irritation soliciting the blood from the head. In treating an attack of apoplexy, the patient should be removed or placed in a cool airy situation; the head and shoulders elevated; to impede mechanically the blow of blood to the head; and all ligatures taken from the

neck; then a copious depletion should be practiced by venesection, and cupping; while revulsion by applying ice-clothes dipped in cold water to the scalp; and counter irritation, by a mustard foot-bath, or sinapism and fomentations to the legs and feet are at the same time resorted to.

The amount of depletion should be regulated by the pulse; at the same time prudence would dictate attention to the age and natural condition of the patient. The indication in a robust person being more decided than in one of ordinary constitution. Cupping is preferable to leeching, being more speedy, it should be practiced upon the temples or back of the neck. The use of ice to the scalp is decidedly beneficial, care should be taken in its application that the parts are not frozen from too long contact; by removing it occasionally the danger is obviated.

From the writings of authors I am informed that blood letting formerly was estimated as an agent of doubtful propriety in the treatment of the disease; viewing the pathology of apoplexy, with its exciting causes, there seems to be no room for doubting that blood letting is here an agent absolutely indispensable.

Active Cathartics is another efficient remedy, by causing determination of blood to the intestines, and exciting a free secretion from their internal surface, indirectly opposing the overwhelming rush of blood to the brain.

The most active agents are indicated, in consequence on the one hand of the necessity of promptitude in treatment, and on the other, of the intestinal torpor — which obtains generally.

Difficulty is sometimes encountered in their administration in consequence of the paralyzed state of the organs of deglutition; to meet this difficulty, a stomach tube

may be used to throw in a purgative.

Oil of Croton dropped upon the tongue often accomplishes the most efficient purgation. Stimulant purgative enema should also be used, such as a solution of Aloes in warm water; or turpentine with Castor-oil.

A solution of tartar-emetic, injected has been highly recommended, from the nausea which it is apt to produce and consequent lessening of arterial excitement, as also its purgative effect.

Cases in which the exciting causes of the disease rest in the intestinal irritation, superinduced by the presence of much feculent matter or vitiated secretions, active cathartics become of primary importance; blood letting affording only temporary relief until the exciting cause is removed.

Emetics are eminently useful in those cases in which the patient has incurred an attack of apoplexy from

the committal of some debauch in eating or drinking. The action of emetics being to promote an afflux of blood to the head, militates much against their usefulness, or contraindicates their employment in the treatment of the disease, when not excited by the cause before mentioned.

Blood letting should be always premised when emetics are to be exhibited; thus in a measure their ill effect in some cases may be obviated.

The most active emetics should be used when indicated; such as sulphate of zinc or copper; because the more speedily we effect the removal of the obnoxious matter from the stomach, the sooner is the desired relief obtained.

Blisters are recommended in weak and enfeebled persons, when the pulse is weak, small and quick, and then should be applied to the legs or arms.

When copious depletion has caused extreme prostration, stimulants may be exhibited with advantage.

Such means as are forementioned in prompt and prudent application would reasonably effect all that remedial management would promise.

More or less modification in treatment would be indicated by the habit of body, age, and the peculiar exciting causes.

If the disease has been induced by the sudden suppression of habitual hæmorrhoidal discharges, the reproduction of them would relieve, leeches to the anus in such cases are useful to restore the condition; if from the healing up of old ulcers on the lower extremities, blisters, sinapisms or issues to the parts would be requisite.

During convalescence a most abstemious diet should be adopted.

The prophylactic management, with reference to those persons manifesting prodromic symptoms of the disease; possessed of any predisposition to it is of last importance.

There should be the strictest avoidance of the commital of surfeit, especially with stimulating ingesta; simple diet maintained, and the avoidance of all causes calculated to induce violent mental excitement.

If such persons suffer from habitual constipation mild aperients should be exhibited.

When the symptoms become more violent, congestion, with brisk cathartics will often abort the disease. The fact that bleeding affords only temporary relief, and that continued improper indulgences, will inevitably give rise to the recurrence of this disease, probably in an aggravated form, should be properly

nsidered and acted upon.

Persons possessing the peculiar apoplectic conformation of body should be warned not to interfere with any bleeding of the nose or hæmorrhoidal discharges; unless they become excessive, the result of such interference being too often followed by the development of apoplexy in its most exaggerated form.

The regular use of a warm bath will often prove detrimental; the daily employment of a cold douche bath to the head, while the legs up to the knees are immersed in warm water is said on the other hand to exercise a beneficial protective tendency.

The habit of drinking large quantities of strong coffee daily is said to have produced the disease in persons having the predisposition to it; its abandonment hence would conduce to a healthful

tendency in such persons.

The daily use of small doses of antimony, has been attributed the preservation of health in some, possessed of the habitual tendency.

In accordance with rule, I have thus endeavoured, with the ordinary helps, to present a correct dissertation upon the subject chosen.

Dissertatio Inauguralis
De
Calore Animali

Praefecto et Professoribus
Academiae Maryllandiae
Medicinae Doctoris
Pro Gradu
Subjecit
Auctor

Robertsus Bartholow

Maryllandiae

Anno Domini
MDCCCLII.

Ad

Guilelmum E. A. Aiken M.D., LL.D.,

In eruditionis ejus miratione

Et inquisitionis latae

Testimonia in scientia chemica

Operatio haec officiose

Dedicatur

Auctore

We shall obtain that which is attainable in a rational enquiry in Science, if we separate the action belonging to chemical powers, from those which are subordinate to other influences.

Liebig Agr. Chemistry.

De Calore Animali

Scientia chemica in praesenti pro medicina indicia multa magni momenti reperit. Malaria Africa nostra, non tantum, multis praeter acceptiones accepit; sed corporis multa processus perplexi et tam sine explicatione erant, per praeterea cui haec scientia attigit aequa ex parte explicati sunt.

Ad Lectiones, farina et vesti cognitarum commodi de hujus scientiae momento, investigationum physiologiae in accepta debita est. Nui theoriae ratiocinatione praeclara valentata, viam novam aperuerunt quae multa phaenomenon mirorum intuitum facere pollicentur.

Omni sunt qui functionum chemicam interpretationem accipere

[illegible] tant; sed illorum leges sunt dem-
[illegible] Regno vegetabili invenimus,
[illegible] leges quum animalis condi-
tioni simili applicata deprehendere
[illegible] possumus. Et sic dubio
[illegible] origine explicationeque omnis
[illegible] creatae — magna similitudo.
Elementa primitiva eadem, quae
[illegible] mutatum compositionem entium
[illegible] connectionis diversis
in [illegible] animali existant. [illegible]
[illegible] diebus, omnes animales
[illegible] ab prograda incrementa
[illegible] cellae producuntur.
Incrementum hoc efficitur necessario
[illegible] partium quibus opus est.
Primus ratio tum mihi ex-
[illegible] ut elementa hae, leges
[illegible] connectionis [illegible] simus [illegible]
[illegible] contur. Elementa diversa a
[illegible] pus compiunt constituit [illegible]

[illegible] sunt. Elementa nec [illegible] tamen mutatio, quinetiam [illegible] partes diversas formant, [illegible] humanum corpus constituunt.

Partes sequuntur leges generales [illegible] et occasi. Incrementum ex constituente cellae primo accipit. Incrementum hoc constituentium [illegible] quatenus opus est; [illegible] creatio eis et materiae applicatio damnum est. Additamenta [illegible] natura allata sunt et occasus processum est, quae in corpore humano procedit.

Porro, moventi musculo partem minimam constituentium frustra [illegible]; et cogitationem singulam [illegible] cogitare est in productione [illegible] materiae [illegible] [illegible] partes [illegible], motion [illegible] [illegible], elementa

[illegible] constituunt et eis commoda alia reponunt: Summodi [illegible] fruendi, damnum contraria et [illegible] plures elementum spe[illegible].

Cibi hominum animalium quae constituunt principales carbonum, hydrogenium, nitrogenium et [illegible] spe operantur. Cum materies comparamus quae in [illegible] accipiantur commodis quae [illegible] nascuntur, haec elementa [illegible] chemica funeste [illegible]. Concludis non-regnum [illegible] conductaria est.

Vitalis animalis origo magna fonte [illegible] chemica est; et vitalitas [illegible] introducta [illegible] interium aequare.

Postquam cibum in corpus [illegible] accipiatur, [illegible]

[illegible] influunt [illegible]

[illegible] resolvunt.

[illegible]estionis necesse [illegible]

in [illegible] [illegible]rma tactibus [illegible]tur.

[illegible] gradu mutationes [illegible]

momento infectae sunt, nam aspectus

pristini [illegible] nihil amplius est.

Mi[illegible] e succum acidorum

et [illegible] et intestinum a mistura

cum [illegible] materia externae naturae

[illegible] [illegible]. Actiones hae

[illegible]mentum levare debent, et

[illegible] facta videtur.

[illegible] calefacto, circulationem

[illegible] in[illegible], et sanguine

omnibus corporis partibus deducto

in ventriculum cordis dextrum

[illegible]. Contractionibus [illegible]

[illegible] per arteriam pulmonalem

in pulmonibus, [illegible] principium

magni momenti in [illegible]

[illegible] accipit.

[illegible] numeres, pone, sanguinis [illegible] mutationes [illegible] circulationem [illegible] pro effectu materiae [illegible] [illegible] fuerint. [illegible] [illegible] vapores spherae in inspiratione [illegible] cordis aeris inducit; quum [illegible] expiratio mutatio est.

Aeris constituentes oxygenium et phlogiston sunt; aere vedito ex [illegible] acidum carbonicum [illegible] [illegible] [illegible] [illegible].

Cum quibus tum imbibendum est, [illegible] totum corpus in aere tempore cum aere in contactum defert; [illegible] tenues vasorum capillarium [illegible] tenant et oxygenio commendum est, [illegible] [illegible] imbibito. Hoc phaenomenon [illegible] endosmosis et exosmosis legibus [illegible] [illegible]. Si liquida duo

[illegible] specialis quadam diversum
a membrana lenis separata, dorso
convexitate permeant, lenis ad
[illegible]. Aeris Oxygenium affin-
itatem magnam habens, mercurium
et [illegible] oculis rapide absorbetur
[illegible] in aere
[illegible] acido et aquâ vel
vapore [illegible].
[illegible] necessarium confundere
crystallorum formae existimabantur.
[illegible] et Hydrogenium cy-
[illegible] omnibus partibus
[illegible] existimabantur et quum
[illegible] advenerant Oxygenio
[illegible] coalescere sed investigationes
recentiores ipsorum statum non ope-
[illegible]. Apparet ab sanguinis
[illegible] mutationem manifestam
[illegible] color tenebrosus in ostium
[illegible]. Mutationes [illegible]

Omnium non sunt, vel saltem
pauca, oxygenium locum et
vitam. Carbonici et aquae obtinent.
Cum sanguinis corpus microscopium
implicatur, maxique corpuscula
sunt oxygenii gestatores.
Ex oxygenii absorptione sanguis
a pulmone ad cellulam mutat
Ex corporum tubis corpuscula hum-
ani sudes omnes pendunt
secundum quod recipiunt. Sanguis
vivi inspirationis damni instru-
mentum ipso quod in corpore
sine vita vitamisque procedit;
partes omnes corporis constitutoribus
Nascuntur ab oxygenii concordia
et damnum vivine ipso redditur.
Aliquin nitrogenia et non-
nitrogenia vel respirationis
sicum et nutrimenti cibum
et partium constitutorum [illegible]

[illegible] animalium [illegible] circulati[illegible]
[illegible] respirationis elementa
[illegible]. Calori necessaria
[illegible]
[illegible] carbonum, Hydrogenium[illegible]
[illegible] in aere nec in corpore
[illegible] [illegible]atione ejus aeri. [illegible]
[illegible] in vasis capillaribus occurrit;
Oxygenium rubras corpusculas
[illegible] affinitatis legibus
[illegible], respirationis elementa fungit
et [illegible] venosum evadit.
[illegible] et acidum carbonicum
[illegible] aquam.
[illegible] [illegible] [illegible] ut
Calor [illegible] [illegible] [illegible]
[illegible] elementorum quae [illegible]
sunt [illegible] et acidum carb-
[illegible] [illegible] et elementa
hae respirationis cibo vel materiis
[illegible] alimentis.

[illegible] resultata

[illegible] chloreum oxydatum [illegible] int;

[illegible] interterunt omnia organica,

et [illegible] chlorum resolvitur dum [illegible]

[illegible], elementa proxima in oxydationem [illegible] int. Potissimus inter-

[illegible] inter chlorum discrepantiae

[illegible] in nota calcina basis est;

[illegible] disuntur, oxydationis

[illegible] solum deprehendunt.

[illegible] consecutaria ut specimen proponitur.

Pulpa $C^{48} H^{36} N^{6} O^{14} = Pr$

Arterial Membrane $= Pr + HO$

Cartilage $= Pr + HO + C$

Vessel Coat $= Pr + NH^{3} + O^{3}$

[illegible] *

Hinc videmus partes differentes corporis uno proximo elemento praeditas ab [illegible] minori vel majori conjunctione.

* Urinary Chemistry

[illegible] Oxygenium

[illegible] cum Oxygenii

[illegible] ante humum, acidum

[illegible] Naseilin. Cum Ethalium

[illegible] Oxylicum et denique

[illegible] acidum carbonicum, eadem

[illegible] quae apparent quum

[illegible] ei aere unitur.

[illegible] quum [illegible]

[illegible] pervasum; Oxygenium acidum

carbonicum aquam et ammoniam

[illegible]. Oxygenii impulsio exitio-

sa et spacium intermedium accurate

[illegible] ad aditi fondus idem

[illegible] contactu mutat. Si quum

[illegible] spacium intermedium suspend-

atur oxygenium actionem ejus cont-

inua, tunc certe rapide cedunt,

[illegible] medium pacce Oxygenii

[illegible] et [illegible] fin [illegible], du-

[illegible] est. Quum [illegible] ex

[illegible] depositam hoc accipiunt non

[illegible]mancantur, oxygenium enim infi-

[illegible] [illegible] [illegible] [illegible]. [illegible]

corporis et haec partes quae solvi possunt

[illegible] [illegible] et quamdiu manent

corporis cum substantia et [illegible]

[illegible] [illegible] residuis [illegible] [illegible]

[illegible] [illegible] in aestate [illegible]

[illegible] [illegible] suppeditat; sed quum

in [illegible] [illegible] proveniunt, obesitas

in toto corpore videntur — Oxygenii

consumuntur.

Si [illegible] suppetiae majores

[illegible] et si [illegible] Oxygenii

introductionem, respirationis etiam [illegible]

[illegible] [illegible] fit, obesitas cumulat.

Corpus animalis non tantum, ex cibo

[illegible] colligit, sed vis est form-

[illegible] ex materiis quibus non

[illegible] [illegible]. Animal pinguescit

si tantum [illegible] depositam.

tantis formatione Oxygenii in
[illegible] insectum respirandum
est; non Animal respiratum cum
sit conditione Animali permixto
[illegible]; velut consumptionis
respiratio in prima Animalia;
[illegible] vero respirationis actum figere
[illegible] — Oxygenium tale accipitur
et [illegible] Carbonii additamentum
[illegible] et in obesitatis depositum [illegible] ostendit.

Potius [illegible] ex familiari phaenomenis
continuitatem recipit, et Animales
hybernatines formandam Momentum.
Respectu [illegible] evanescere expec-
tamus [illegible] quae Oxygenium
[illegible] [illegible]. Sic facile [illegible]
[illegible] conditionem [illegible] aequilibrium
[illegible] Momenta duo; Carbonum Hydrogenium
[illegible] debent; quod quidem Oxygenium
[illegible], et Mobilitas mui vel alteri
[illegible] ab opposite ejus temperantia.

[illegible] calor [illegible] quo fiat, per [illegible] capillares occurrunt corpora calor [illegible] quo efficiat. Corporis hygiene [illegible] temperatio capillarum hisce [illegible] ad extrema et [illegible] partem.

Ex [illegible] quibusque morbis [illegible] externae temperamentum praecipue implicari videntur. Circulatio cum partibus patientibus in affectum [illegible] minuta et itaque calor functio est rapidior. Videtur et [illegible] pandulum obesitatem rapide [illegible], [illegible] suppetias decidentibus horis. Major celeritas hygieni [illegible] [illegible] tendunt pruriture respirationis [illegible]. Partes calor saepe [illegible] [illegible] in inflammationem ad locum et ad [illegible] [illegible] [illegible]

[illegible] tertium ad [illegible] [illegible] ad partem
[illegible] [illegible] ; [illegible] [illegible]
[illegible] ostendit [illegible] [illegible] interiore
[illegible] procedentis expendendi
[illegible] [illegible] Sanitati [illegible] [illegible].

[illegible] [illegible] majorem ostendit
[illegible] consumptionis et [illegible] consump-
[illegible] tepidior caloris evolutione majore
[illegible] debet.

Humanum corpus relativ-
[illegible] [illegible] ad [illegible] circuitus habet
[illegible] [illegible] cumulus calefactus;
[illegible] [illegible] caloris [illegible]
[illegible] [illegible] [illegible]; et
[illegible] [illegible] consentanee [illegible].
Calor radiatur quam corpus [illegible]
[illegible] [illegible] [illegible]; [illegible] [illegible]
[illegible] [illegible] [illegible] ratione physica
[illegible]. Itaque [illegible] incitam
[illegible] [illegible] [illegible] [illegible] est
[illegible] [illegible] [illegible] [illegible]

[illegible] mechanicis [illegible]
[illegible] humani corporis [illegible]
[illegible] parentis, corporis longe-
[illegible] [illegible] Quarto. Tum
[illegible] [illegible] cordis est
[illegible] [illegible] vasculorum systemi
[illegible] [illegible] ab [illegible] ad [illegible]
[illegible] [illegible] functionum.
[illegible] [illegible] pulmones cutaneum
[illegible] [illegible] et [illegible] cum Oxygenio
[illegible] [illegible] decipere, mobilitas
[illegible] [illegible] [illegible] functionis propriis
[illegible] [illegible] et conditio totis est.
[illegible] pulmonum absumendum est
[illegible] [illegible] quae magnas vitiones
[illegible] et Hydrogenii continent.
Tandem et Alium Celaeum quae
[illegible] [illegible] materiis principes sunt,
[illegible] sufficientia habent
[illegible] [illegible] temperamentum
[illegible] [illegible] [illegible]

[illegible]

[illegible] [illegible] incrementum [illegible]. In prima aestate [illegible] hostii aestate cibus [illegible] in [illegible]ceptione fere [illegible].

[illegible] differentiae debitae sunt ad [illegible] corporis, et [illegible] [illegible], [illegible] [illegible] [illegible] [illegible]. Aestate [illegible] [illegible] ex parte [illegible] [illegible] [illegible] tubulum reciprocantur; [illegible] [illegible] [illegible] [illegible]. [illegible] [illegible] sustentationem a calore [illegible], aequa ex parte [illegible] [illegible] [illegible] respirationis functiones diminutae. Itaque [illegible]

[illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible] [illegible] corporis [illegible]

[illegible]

[illegible] Sunt.

2. [illegible] calorem

[illegible] in [illegible] sectorum officium

[illegible] [illegible] inicit et itaque

[illegible] [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible] [illegible] enumtimem

[illegible] [illegible] et calx Mutationum

[illegible] [illegible] [illegible] sed investigationes

[illegible] [illegible] [illegible], generi [illegible]

[illegible] [illegible] [illegible] [illegible] partem [illegible]

[illegible] [illegible] collatione Nervorum [illegible]

[illegible] [illegible] [illegible] est. Si Nervus

[illegible] [illegible] [illegible] ligatur, temperamenti

[illegible] [illegible] [illegible]. In Hemiplegia

[illegible] [illegible], [illegible] [illegible], [illegible], [illegible]

[illegible] quantumcunque algina ex parte

[illegible] [illegible] [illegible] [illegible]. Sed genus

[illegible] [illegible] [illegible] [illegible] non commoratur

[illegible] [illegible] [illegible] [illegible] [illegible] est.

[illegible] processu nervorum directè
[illegible] est, et fluidus nervous
[illegible] in functioni [illegible] [illegible]
[illegible]. Impulsio nervosa [illegible]
[illegible], [illegible] nostra negotium
est [illegible] [illegible] ut [illegible] [illegible].

Tutius est nos [illegible] [illegible]
[illegible] [illegible] sine justâ causâ
[illegible] quae sensationum [illegible]
[illegible] [illegible] vel ulterior ~~[illegible]~~ efficiunt.

Finis.

[illegible] auctoritates alligatae sunt,
[illegible] Organic Chemistry, Turner's
Elements of Chemistry. Fownes Medical
Chemistry, et Drapers Elements.

An
Inaugural Dissertation
on
Ergota
Submitted to the Examination
of the
Provost Regents & Faculty of Physic
of the
University of Maryland
for the Degree
of
Doctor of Medicine
By
Lewis Stonesifer
of
Pennsylvania,
February 1852.

To
Richard H. Thomas M.D.,
Professor of Obstetrics
In the
University of Maryland,
As
A Mark of Respect
For
His Private Worth & Professional Character,
And as
An Acknowledgment
Of
His Ability & Fidelity as a Teacher,
This Dissertation
Is Respectfully Dedicated
By
His Friend,
The Author.

Ergota.

Introductory:

Before entering into a description of Ergot I will make a few remarks.

The subject is one that has created great dispute among different authors, both, concerning its nature and formation, and also its value as a parturifacient. I do not expect to add anything, to the vast amount that has been already written by men of learning and ability, nor can I present any facts derived from my own ex-

perience. Nevertheless, I will not withhold my opinion concerning its value when judiciously exhibited, or its baneful-ness, when administered indiscriminately.

With this medicine no doubt great good has been accomplished, while on the other hand, by it, much harm and loss of life have been produced. Many a poor woman has been relieved from a long, tedious, & exhausting labor, by it, when given by a judicious Practitioner. But, on the other hand, many a life has been cut off by it, before the first morn had dawned upon its existence, when prescribed by pretending quacks or ignorant, and officious midwives.

Ergot should be exhibited understandingly and with circumspection, inasmuch as it is powerful, in its action, powerful erroe.

And no man, who wantonly and recklessly prescribes it for the mere purpose of saving time, or making a bad job short, deserves the least regard from the profession — much less any patronage from the people.

If, in the free expression of my own opinion on so important a subject, I should present anything that does not correspond with fact, I hope it will be remembered that it comes from one, whose knowledge is merely theoretical. I hope to be corrected before he has an opportunity to administer the drug.

Botanical History.

There is great diversity of opinion among botanists concerning the nature and formation of Ergot; and great attention has been paid in investigating the matter. It has been watched carefully from the time the germ first makes its appearance, until it has arrived to its full development. Some contend, it is the seed altered by a disease, caused by the agency of an insect; but this supposition is not correct; for an insect would probably destroy the whole seed and leave none to become ergotized. M. Léveillé says a small tubercle may be seen on the germ which pours upon it a viscid matter, which alters the appearance of the seed, giving it a yellowish coating without preventing its growth. The tubercle was con-

sidered by M. Tuville a fungus, and named by him "Spacelia segetum".
The most recent and probably the most correct opinion is that of M. Duckett.
Having watched its progress through all its stages for many years, he says it is a diseased state of the grain, caused by the presence of a parasitical fungus, which he calls, Ergotatia Abortifacens. It is a white dust, with cobwebb-like filiments, which cements its anthers & stigmas together, giving it a mildewed appearance.
M. Duckett is of opinion, that the filiments of the fungus penetrate the tissue of the germ while young and tender, and as that increases, it is made up partly of the diseased structure of the germ, & partly, of the fungus matter. Sporidia are said to be about the four thousandth of an inch

in length, and when a grain containing the fungus is immersed in water, they will sink to the bottom. Sporidia do not increase with the growth of the grain, but when it has arrived at its medium size it presents a brownish appearance, in consequence of the sporidia ceasing to propegate. There is no doubt but this is the cause of the disease in the scale cereals. For by sprinkling this substance upon the soil near the roots, it will produce the disease in many other plants, as well as, in this. This disease is mostly found in rye, & especially in that, which springs up spontaneously in the vicinity of old stacks & elsewhere. It effects it unequally — In some ears but one grain — in others all are diseased.

The Ergot is found to project some distance beyond the husk, it being from half an inch, to one & a half, in length. It is from half a line to four in breadth, cylindrical in form, with obtuse angles, usually curved like the spur of a cock, & generally with longitudinal furrows on its sides.

It presents externally a black color, somewhat glaucous in consequence of the Sporidia. Internally it is a yellowish or violet-white - smooth at its broken surface, having a peculiarly disagreeable smell - resembling that of putrid fish. Its taste is nauseous and acrid. Ergot, examined internally with a Microscope, is said by Mr. Luckett to possess small globules, which contain oil. It is said to be more efficacious if gathered before than after harvest.

Ergot is liable to deterioration when exposed to the atmosphere & moisture. It is also rendered inert by a small acarus, which feeds upon it, eating the whole interior, leaving nothing but a mere shell with excrementitious powder.

It should be kept excluded from the air, in bottles with glass stoppers. In this way it has been kept for several years. Still, it is advisable to renew it every year, and it should never be ground till demanded. If preserved in this way it is efficacious and reliable.

Ergot has been analyzed by several Chemists. The most recent and complete analysis, is that by M. Legrip. He found it to contain fixed oil - starch - albumen - inulin - gum - uncrystallizable sugar - resin - fungin - vegito-animal matter - osmazome - fatty acid - lignin - coloring & odorous

principles - fungate of potassa - chloride of sodium - sulphate of lime & magnesia - subphosphate of lime - oxide of iron - silica & water - &c.

Physiological Effects.

This part of the subject is more interesting to the accoucheur, and therefore I shall dwell upon it now at large, and endeavor to show its uses, and especially, its value as a parturifacient. Ergot was employed in cases of protracted parturition, to stimulate the uterus to action, by Midwives in Germany, France, and Italy, long before its powers were known to the medical profession. The name given to it by them was Mutter Korn, which

in English would be, Wombud.

It was first recommended to the profession by Dr. Stearns of Saratoga county New York, in the year 1807, since more particularly, by Dr. Dewees who has used it quite extensively and commends it in the highest terms.

It is now universally known, & is considered the best parturifacient we possess. In fact it is the only medicine known to act specifically on the uterus. But this remedy like many others has its enemies, and has been greatly underrated by some authors. Dr. Hall formerly professor in the University of Maryland stated in his lectures that he never derived any advantage whatever from its use. How it came to fail in his hands, it is not easy to decide.

My Preceptor Dr. Joseph A. Short of Pa. who has been practising more than thirty years, and has had a very large obstetrical practice, assured me that he had administered Ergot to about two thousand patients & always with good effect, & what is better, he never knew any bad results follow its use — and as he is a man, & he stands high in the profession, his opinion is entitled to respect.

Dr. Davis, the Preceptor of Dr. Short, had used Ergot very extensively & held it in high estimation. Reference might be made to many respectable practitioners who have used it with equal success, were it necessary.

There is no doubt Ergot has sometimes failed to produce

the desired effect. But this may have been owing to a peculiarity—an idiosyncrasy, on the part of the patient, or, to the inertness of the article exhibited—ergot being liable to deterioration.

Apothecaries, at the present day, keep most of their medicines in a pulverized state, and no doubt more or less exposed to the atmosphere; and physicians, who do not keep their medicines, when called to a case of tedious labor, send a prescription to the apothecary and get this article. The result is, it does not produce the desired effect—consequently the ergot is charged with not possessing the power to bring on uterine contractions. No doubt this is the chief cause of the occasional failure of Ergot,

Ergot, when of good quality (if there exists no peculiarity on the part of the patient) produces strong & long continued contractions of the uterus. These differ from those of natural, or unassisted labor, by being continuous, & without intermission. Its agency is manifested in from fifteen to thirty minutes after its exhibition, & if repeated, at small intervals, continues to act till the child & placenta are expelled - generally leaving the uterus contracted into a globular form.
When largely given ergot sometimes produces cerebral disturbance, which is manifested by the patient's complaining of a sense of weight & pain in the head, giddiness, dilatation of the pupil, delirium, &c. Very little change is perceived in the circulation; the

action of the heart is sometimes diminished. It also occasionally causes nausea and vomiting, but this is rather favorable than otherwise, inasmuch as that which causes it, also aids in relaxing the abdominal muscles & the genital organs

Ergot when long used is said to produce "dry gangrene". Great epidemics have occurred in Germany & France, where rye more or less contaminated with Ergot, is extensively used. It is supposed to diminish the circulation - enfeeble the nervous system, & impair the digestive organs, & thus pave the way for "Gangrene" Gangrene first attacks the lower extremeties, & gradually extends towards the trunk.

It is seldom arrested except by amputation.

Some have denied that, Ergot was the cause of this disease, but men of investigation, residing in the districts where these epidemics prevailed, have substantiated the fact., Such epidemics have never been known to any considerable extent in this country. Ergot is charged with another great evil, that of causing the death of the foetus, & to this, it must be confessed, it is more or less obnoxious.

Some say it destroys, in the manner of Opium, by being taken into the circulation of the mother, & thence extended to the foetus, & in this way, poisoning the child.

But if given where there is no obstruction to its passage, the child will most probably be expelled

before the Ergot has time to enter the fœtal circulation. Others say it causes death by producing such violent & long continued contractions of the uterus as to compress the cord & interrupt the circulation between the mother and the fœtus. This might happen when there is some obstruction to delay the delivery, & when the cord is so situated, that the uterus comes directly in contact with it, so as to compress it. But this in all probability seldom occurs, & when given with judgment & understandingly Ergot will rarely do harm. In many cases, no doubt, Ergot is unjustly accused of destroying children, that were dead before its administration was determined on,

The action of ergot on the uterus is so powerful, it is necessary that the accoucheur should have some rules to govern him, in order to avoid the danger which might follow its injudicious employment.

It may not be amiss therefore, to mention a few of them here, and the following are among the most important.

And First;

Ergot is strictly contraindicated in cases of malformation of the pelvis — malpresentation — where the os tinea is rigid — the genital organs not sufficiently relaxed — and where the placenta is attached over the os uteri. It should not be administered where there exist polypi

hydatids, tumors, or any obstruction in the passage, which would prevent the fœtus from being readily expelled. In a case of deformed pelvis the Ergot, producing powerful contractions of the uterus, might so compress the fœtus, or press it against the pelvis, as to cause its death, & perhaps prove fatal to the mother. Or, if the arm presented, it would be impossible to perform the operation of turning, (which would be necessary before the child could be expelled) after its exhibition, because of the resisting powers of the uterus; & the consequence might be a rupture of that organ.

The same disaster might result if it were administered in cases where the os uteri is rigid.

Secondly; Ergot may be exhibited in cases, cæteris paribus, where there is a well formed, full-sized pelvis — where the os uteri is dilated & dilatable — where the fœtus presents naturally, & there is no disproportion in size, between it & the pelvis, and in fact, in any case where there exists no obstruction to the ready exit of the fœtus. Ergot is employed mostly in cases of protracted parturition, attributed to insufficient action — where the parts are well dilated & sufficiently relaxed — & all that is required to expel the fœtus, is contractile power. In such cases, Ergot increases the action in fifteen or twenty minutes & the labor is far more speedily terminated.

It is one of the best remedies we possess to control uterine Hemorrhages. Many women are subject to hemorrhage after delivery. This at so critical a period, prostrates them very soon, & sometimes proves fatal, if not timely arrested.

By giving one or two doses of the Ergot, the contractions may be increased, & thereby, the open mouths of the vessels closed.

Where the Accoucheur is aware of this predisposition, on the part of the patient, he may prevent the occurrence of hemorrhage, by administering Ergot just before the child is born, thereby keeping the uterus firmly contracted after its complete evacuation

Ergot is used to bring on premature labor when there exists

a deformed pelvis, in which the passage is too small to allow a full-grown foetus to make egress.

It will also promote abortion when it has already commenced (brought on by hemorrhage or accident) by causing increased contraction, & consequently, a speedy expulsion of the germ — at the same time restraining the hemorrhage.

This fact makes Ergot liable to be abused. The "unfortunate" use it to expel or "cover" their "shame". And the unprincipled prescribe it at their solicitation, to enable them to "bury" their "disgrace" and "responsibilities" in a premature oblivion. In this way Ergot has been & is a Destroyer of myriads! — Myriads, most of whom are "Innocents" — and for whom it is far better to be "away"!!

From its astringent properties, (if indeed it posses other than its contractile force) it has been employed in hemorrhages of other organs of the body, such as Hæmoptysis Hæmatemesis &c. &c. with success.

Drs. Lewis, Churchill & others have recommended it very highly in Menorrhagia & Uterine leucorrhea - and affirm that they have given it in obstinate cases, where such medicines as are most commonly administered had failed, & had succeeded in arresting the discharge. They commend its exhibition in five grain doses three times a day. It is also recommended to expel clots of blood, hydatids, and fungus growth from the Uterus. It has been suggested as a remedy in Dysentery, Dysmenorrhea &c.

The question in regard to the modus operandi of ergot is yet unsettled. Some believe it acts directly upon the nerves of the stomach -- others contend that it acts through the medium of the circulation. The latter is the most probable supposition.

Administration.

Ergot is administered in various forms, such as Powder, Infusion, Decoction, Tincture, & the Oil of ergot.

The powder is exhibited in doses of fifteen or twenty grs. every half hour, in cases of protracted labor, until the desired effect is produced.

The Infusion, prepared by macerating a drachm of the drug in four ounces of boiling water, is given in doses of two ounces every half

hour till its peculiar effects are manifested. This form is probably the best, inasmuch as the active principle is contained in a liquid state, which comes in contact with the surface of the stomach more at large, thereby affording more prompt & general action upon the nerves of the stomach, or a more speedy entrance into the circulation. The dose of the decoction is ditto that of the infusion. That of the Tincture a teaspoonful, that of the Oil twenty to fifty drops.

In Leucorrhea & Menorrhagia it is given in doses of five grains three times a day.

It may sometimes be desired to administer this drug, where the stomach, powerfully acted on through sympathy with the uterus, rejects everything taken into it.

under these circumstances, the Ergot might seem to increase that, nausea, so that none of it would be retained if exhibited in the ordinary way. Still, as I have heard it somewhere suggested, it might be retained if some stimulus were added to it when given, A small amount sufficient to excite the stomach somewhat, would answer every purpose. Besides Ergot is said not unfrequently to depress the patient, already too much exhausted, it may be, & in such cases also, something stimulating, combined with the parturifacient, would no doubt be of service. Brandy it is believed in small doses will answer this end. But perhaps it were better to follow the advice of our worthy Professor & use

the Ammoniated tincture of Ergot. Antidote.

Whenever an overdose of the drug has been administered, the proper treatment to be adopted, is, to evacuate the stomach & bowels by emetics & Cathartics. Chlorine water has been suggested inasmuch as Chlorine decomposes Ergot.

Such are some of the properties and qualities of Ergot, such its powers for good or evil — such its uses, and such its abuses. If, in endeavoring to present its claims as a medicine carefully, and impartially, I have failed, I take consolation in the fact I have not failed alone — Upon the other hand I have succeeded I shall be more than satisfied.

An

Inaugural Dissertation

On

Podagra

Submitted to the Provost, Regents and Faculty of Medicine of the University of Maryland, for Examination for the Degree of Doctor of Medicine.

BY

Albert W. Gray

of

Virginia

Baltimore Md:
March 1852

The disease which I have chosen as the subject of this dissertation is one of peculiar interest; both to the Scientific Physician, and to the Empiric. It presents to the former one of the most beautiful subjects of study, that we could have deduced from the Nosology. For there are few diseases whose Pathology, Causes &c, have been the object of more able investigation, than the one under present consideration. And to the Empiric it presents even more decided attractions: owing to the fact that those chiefly afflicted with Gout, are principally men who rank among the wealthiest persons in every community.

this circumstance he is easily, [illegible] by the very fact that their situation in life enables them to live in affluence and luxury, which are in themselves productive of this disease. And here let me remark, that for some time past, whilst studying the subject upon which I am now engaged, I have been somewhat surprised at finding men of talent, and education, labouring under so false an impression of this disease, as to believe that an attack of it would act as a purifier of the system, from many of the constitutional derangements, which they have entailed upon themselves

of the previous habits of life, and consequently many of them [illegible] the power, to bring [illegible] this distressing [illegible], by indulging [illegible] the Luxuries of table, and the Couch, two most potent causes of [illegible]. But I have expended time enough in an introductory, and will therefore proceed immediately to the consideration of the symptoms of this disease. In the earlier stages of this disease, the symptoms are clear and unmistakable. For the very mode itself in which the disease makes its attack upon the —

[illegible] - [illegible] to a [illegible]
[illegible] exactly what it is.
In instances a fit of the
[illegible] almost always attacks
the patient during the
night [illegible],
with a feeling of most
[illegible] agony [illegible]
in the [illegible] of the great
toe, the pain gradually
continues to increase until
it has reached the very
climax of agony, when it
suddenly ceases altogether.
Sometimes to be sure the
cessation is more gradual,
but usually, immediately
before the [illegible] of
the paroxysm (in many other
diseases) the misery is most
intense. Or to use the more

[illegible] image of — [illegible] "Evils that [illegible] [illegible] [illegible] [illegible], most of all, show [illegible]" [illegible] [illegible] [illegible] repeated for several nights in succession, when the disease takes its departure for a longer or shorter period. Fever often at first intervenes between the attacks. But in the course of time they become more frequent — attacking the patient every two or three months — until at last it becomes an almost constant — torture. I omitted just now, to mention a very important fact, that in the earlier attacks

after the cessation of pain the patient [illegible] much improved in their general health, which in a great measure accounts for the idea so very prevalent among the enthusiastic, which sometimes is in the mouth of most of them, that great value as a principle of the constitution, that the cause of the disease manifests itself in an entirely different type. The pain is not now felt in the great toe of one foot, but begins to attack both the ankles, and often both at the same time. It begins also to extend to

the large joints of the body.
And at last, although the pains are not so agonizing, the general health fails under the repeated attacks.
All these of course have the effect of obscuring the Diagnosis. So we can no longer expect any set of symptoms, which we may now gather together to be Pathognomonic, but content ourselves with regarding the commemorative circumstances which now mark the disease.
These we discover by enquiring into the previous history of the case and comparing the

causes &c with the disease with which we are most apt to confound it — Rheumatism — Among other symptoms, we observe various affections of the Thoracic and Abdominal Viscera.

Affections of the Kidneys are also among the most common, in this disease. This may be accounted for by the fact, that it has been discovered by able investigators that the urine of Gouty patients — contain Lithic acid, which is productive of most painful results.

There is one other peculiar effect of Gout, which I may as well mention here

[illegible]

nevertheless cases, proves, on
point [illegible]

The character of this disease
[illegible]
that make their appearance
[illegible]
principally upon the joints
[illegible] are seen to be composed
of a [illegible]
[illegible]

This comprises all I have
to say concerning the
symptoms of Gout. The
next [illegible] the [illegible]
[illegible] to [illegible]
will be its causes. Firstly,
It has been proved beyond
a doubt, that this is a
hereditary affection, that
that it is an inevitable [illegible]

that a Progenitor must transmit to his offspring, nor indeed, that even if the child had inherited the predisposition from his ancestors, that he could not by proper diet, and healthful exercise avert the disorder. But as a general rule we will find that a large majority of Gouty patients are able to trace back the malady to some one of their forefathers. Out of five hundred and odd cases, that were carefully investigated by Sir Chas Pendarvon over two thirds could so trace back their disease. But under all circumstances whether a person

[illegible] an Epicurean style of living, and idle, lazy habits of life are fewer [illegible] frequent [illegible] Polygamy.

But I believe that with [illegible] extensively, High living, and indolence, must be combined. For there are many cases on record where persons have indulged themselves in the pleasures of the table, and yet by constant attention to exercise, have lived entirely free from the disease. Once again the unavoidably inactive lives, which females on account of their

[illegible]
[illegible]
their comparative exemption from Gout, proves to us at once, that inactive habits alone, [illegible] of a particular pedigree. Age must also be taken into consideration. This disease usually attacks persons, at a somewhat advanced time of life, after having spent their life in indolence and excess.

But [illegible] sometimes attacks with [illegible], after having indulged in excessive [illegible] [illegible] the disposition. [illegible]'s Cyclopaedia - American edition Vol xvij - part 1 - Dras-particularly pleases with

[illegible] old adages on this subject. One, was from the Greek, "[illegible] Bacchus, and Cupid relaxing Venus, is born a daughter — Cupid relaxing Venus." The other, from the Latin, is equally witty — "Bacchus frater — Venus mater, et Ceres altrix Aphroditis, [illegible] the Cupid, [illegible] are in producing sin."

Dr Wilson says "That the use of wines and malt liquors, have a much greater tendency, to the production of this disease, than the abuse of tobacco, [illegible] there is a predisposition to Gout in a person, the slightest

exciting causes may [illegible]

[illegible]

[illegible]

the causes and symptoms [illegible] that the disease which it most resembles is [illegible], and with [illegible] previously [illegible] it may easily be confounded [illegible] at the same time when [illegible] studied the diagnosis is [illegible]. In the first instance Rheumatism attacks the large joints, while Gout affects the small ones. Again the former is brought on by cold and exposure, whilst the latter owes its power to idleness and sensual indulgence

And lastly. In Gout (as before stated) the urine contains Uric acid; whereas in Rheumatism the urinary concretions are of the Lactic diathesis.

But it may here be objected to the first named, mode of diagnosis, that in the latter stages of Podagra it effects the large as well as the small joints. Well under these circum-stances, we must examine into the causes, and previous history of the case, which will generally afford us unfail-ing evidence by which we can decide between the two diseases

[illegible] the ancient doctrines which asserts the humoral origin of the disease, to be the true one". He then goes on to observe that "Ihinhifia [illegible] (which may well be [illegible] a poison) is generated and continued in the body, and silently collects in the blood, until after obscure threats, and delusive mutterings, it explodes in the foot, and then the bodily economy is for awhile unusually free, and tranquil". — Further he proceeds to show, how many [illegible] administered, unwholesome food &c when taken

[illegible] the stomach, [illegible]
[illegible] Materies Morbi, which
[illegible] absorbed by the blood
[illegible] continues to increase
[illegible] at last there is
[illegible]
[illegible]
[illegible] reference to, [illegible]
is supported in this theory
by many eminent authors,
[illegible] whom are Drs Hollands,
Burne [illegible] others, all of whom
agree that there is some
[illegible] in the [illegible]
but what this Materies Morbi
is, has also been a matter
of [illegible] dispute.
Vesler, Chapman and many
other distinguished men
[illegible]

[illegible] things, all seem to differ in their decisions on this point. Dr. James says "It is a peculiar saline acrimony existing in the blood in such a proportion as to excite [illegible] in [illegible] the [illegible] of the [illegible] in [illegible] parts of the body." But [illegible] conflicting [illegible] statements on the subject, I am [illegible] to the conclusion, that as yet, we have no perfectly satisfactory [illegible] of this disease. And yet [illegible] judge, I believe that there is [illegible]

it may be, in the blood which by settling in the [illegible], [illegible] the [illegible] [illegible] [illegible] [illegible].

The "Prognosis of Gout" [illegible] deter[illegible] [illegible] a few seconds. It depends entirely upon two circumstances. Whether it confines itself to the extremities, or attacks the internal organs. When it confines itself to the feet, it is not generally considered serious. But when it falls upon the internal organs, it becomes [illegible] alarming, [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] by no means out of danger.

The treatment of Gout?

Here again Sydenham, Cullen, Harvey, Rush, and other distinguished Physicians have all presented to us entirely opposite opinions. Sydenham for instance, does not seem to encourage the idea of any very active treatment during the paroxysms. Whereas both Cullen, and Rush, think it is proper in some manner, to subdue the inflammation, and relieve the patient from his sufferings. And again, Harvey advocates the plan of immersing the affected member in cold water, which is considered by many as very injurious practice, But

Harvey who was affected with Gout, treated himself in this manner, & he lived to the uncommon age of eighty. Mr Scott, of Highgate, and others have adduced many cases to prove the benefit to be derived from cold applications to the affected joints. But this mode of treatment has been once & like remains a subject of great dispute. In many cases, the instances are the following applications have been proposed and approved, Cold, as Douches, Blood letting, Non applications. But at last a great discovery has been made in the management of this

disease. I refer to the Colchicum, which remedy in cases of Gout, almost deserves to rank among specifics. Among the preparations most in vogue, are the Wine, Vinegar, and inspissated juice of the plant. Colchicum, Dr. Watson thinks is the principal ingredient in the Eau Medicinale d' Husson, a great French quack medicine, which obtained great renown as a remedy for Gout.

The best mode of administering the Colchicum seems to be, to give the Vinum Colchici and follow it up with a saline or Black draught — This will be likely to cut —

[illegible] Young, that,
[illegible]
[illegible]
indulgence, were intemperance
[illegible], we can not but see
how [illegible] we should be
the strictest attention to
diet and exercise. When
therefore we are called
to [illegible] from
an attacks of [illegible],
we should at once [illegible]
his age and previous
habits of life. If we find
him young, we may ad-
vise an immediate change
in his manner of living.
Instead of indulging
in all the luxuries which

it is likely, [illegible] accustomed to: he ought to confine himself to plain food. The same time [illegible] diet, if he is sufficiently strong he ought to [illegible] regularly, every day; but not so much as to cause him fatigue. This advice if strictly complied with, will in most cases cause a most gratifying change in the patient, you see he [illegible] as well as prevent to a great extent the return of the paroxysms. But if the patient is old, and has for a long time been subject to fits, we [illegible] more [illegible] have we [illegible] and changes

in his mode of life. This habit must be [illegible] cleared of its injurious — needs [illegible], [illegible] at last we must allow him some of the most harmless of the luxuries he has been accustomed to; or else by a different mode of management we may hasten what we are endeavouring to prevent. Exercise must be very carefully attended to, for our patient is not now able to bear any fatigue. In our cases it must be commenced very gradually. Waiting is the resource to at first until the strength of our patient may be able to

view a short distance in a carriage, but we should [illegible], avoid causing him any fatigue. All of these things should be carefully attended to [illegible] the [illegible] of the patients life. But the great difficulty is that very few patients will consent to live in this plain, and to their prejudice manner, so that their [illegible], and [illegible], to the profession has been, to invent some prophylactic remedy, that would be as [illegible] with so great a sacrifice. Of course this causes the discovery of a number of remedies which the inventors at the

[illegible] powers, [illegible]
[illegible] specifics among the
principal of these were
the Potassic powders, so
[illegible] [illegible] [illegible] [illegible]
the [illegible] of [illegible] [illegible]
an attack of gout. He
for a long time held a
very great reputation. Dr
Hahnemann considers it quite
a valuable remedy in some
respects, but always to be
combined with proper spinous
regulations. Antacids have
also been used, between the
paroxysms, [illegible] for the
purpose of destroying the
lactic acid which is thought
by many to be the Morbific
poison contained in the
blood. Magnesia has also

been resorted to in combination with Rhubarb, by Sir M. Halford, which Dr Watson thinks about as good a prophylactic as any yet discovered. But these remedies ought only to be adjuncts to a constant attention to proper diet and healthful exercise. In fact to sum up the whole affair in a few lines: the patient must choose between two evils. Either to suffer with the Gout, or else entirely eschew his idle habits of life, together with his — Champagnes, Canvas Back Ducks &c.

An Inaugural Dissertation on Necrosis

Submitted for Examination to the Provost Regents and Faculty of Physic of the University of Maryland for the Degree of Doctor of Medicine

by

George W. France
Baltimore
Md.

This disease is one of the most interesting as well as one of the most common to which the bones are subject — The term Necrosis literally signifies a death, and although it is applied by Surgeons to a special affection, the term itself has no reference to the particular portion of the system in which this disease locates itself. The term is ambiguous or rather inappropriate inasmuch, as it is not in all cases of the disease, right to infer that the bone is really dead but rather that it will eventually be so, if the affection be not arrested by nature or art. The term therefore is inadequate

to express anything definite concer-
-ning the disease which it is
used to denote, either as to its
nature or seat. and incorrect
unless limited to that stage
of the disease when the death
of the part has actually occur-
-ed, It is not to be infered from
this however that it would be
judicious to abandon the term
altogether and substitute another
more appropriate. It has too long
and too generally been employed
to designate the disease in question
to be cast aside, without much
confusion and inconvenience
resulting— It is after all a
matter of no practical importance
for as much that "it matters not
what we call a disease, provided
that the name conveys no esso-

—neous impressions concerning its nature or treatment."

<u>Nature of Necrosis</u> — Differences may be observed in the character of this disease according to the particular bone which it affects. These differences are owing to the dissimilarity of the intimate structure of bones, and to their peculiarities of nutrition, and also to the relation which the part affected bears to the surrounding tissues. As an instance of variation of structure modifying the disease, the bones of the cranium may be adduced. These consist of two distinct lamina or tables, with an intervening cellular structure called the diploe. Others as

for example the turbinated bones, and some portions of the scapula, have but one canina. The nutrition of these bones is accomplished somewhat differently, in those of the cranium, the blood vessels which convey the nutient material, are contained principally within the diploe. The vessels which are destined to suply the turbinated bones pass chiefly through the periosteum — the nutition being affected in a great measure by imbibition. Hence we see that some bones are more vascular than others — and indeed we have one portion more vascular than another of the same bone. — J. E

the spongy extremities of the femur, tibia, etc. From these variations both structural and vascular in bones, it will readily be inferred that the disease, will appear to manifest a different character and symptoms, accordingly as it is seated in one or another of them. The investing membrane of the bones, or periosteum, is directly concerned in this affections, It is necessary therefore to a knowledge of the pathology of necrosis to be acquainted with the anatomical character and use of this membrane, Its texture is evidently fibrous and it is in some places made up of two lamina, Its

connection with the bone is maintained by a great number of blood vessels, which pass from it into the bone. Its outer surface is of course in relation to the surrounding soft parts, to which it is connected by a loose cellular tissue. When examined in the ordinary or normal condition, it presents a polished glistening appearance, approaching in color to a pearly whiteness. It is insensible in health, but in disease it becomes sensitive, the nerves which it must of course possess have never been distinctly pointed out. The use of the periosteum is in all probability to form a medium

for sustaining and transmit-
-ting vessels of nutrition to the
bone. this appears to be proved
by the fact; that death or ex-
-foliation of the bone usually
occurs, when it is removed.
In addition to this another pur
-pose has been assigned it
viz. of preventing the bone
from participating in contig-
-uous disease. "as the pleura
turns off an abscess in the pa-
-rieties of the thorax from its
cavity, or the peritoneum from
the abdominal cavity"
In addition to this external mem
-brane, bones are covered on
their internal surfaces or
cavities and cells, by a delicate
membrane, which must be
here noticed, It is a semitrans-

-parent somewhat pellucid mem-
-brane, extremely delicate in
structure. Its use appears to
be shown in the vesicles which
it forms, which are evidently
intended to contain the
marrow or medullary substance
of the bones. It is termed
the internal periosteum or
medullary membrane.

Necrosis may truly be
defined as an affection commen-
-cing in inflammation, passing
into suppuration, and termi-
-nating in perhaps the ma-
-jority of cases, in the death
of the bone, or the portion
affected. This inflammation either
in the covering membrane
or its internal membrane
and even in the bone itself

It is to be borne in mind that this inflammation does not differ from the simple va-
-riety except in some of its results. It does not therefore arise from specific cause as many have supposed, but from ordinary ones, and is not malignant in character. This is shown by comparing this inflammation, to the same disease when it affects the soft parts. The course of events is the same, first heat, redness, pain, and this succeeded sooner or later by a rigor or chill, announcing the occurance of suppuration. The causes which produce necrosis are similar in kind to those which result

in mortification of the soft parts. although not necessarily so violent. It requires but a slight cause to produce necrosis, whilst the same cause would have to be greatly increased in violence to produce gangrene. This is owing to the low degree of vascularity of bone. compair-ed with the high degree possess-ed by the tissues generally.

Exciting Causes. These comprise two distinct classes. one division having their origin with-in the system are termed Intrinsic — These intrinsic causes are due to a peculiar condi-tion of the system. often the result of some disease whose character it is to debilitate, and impoverish the nutrient powers.

of the blood. The other class or extrinsic, include causes of a mechanical nature such as are applied to the bone or periosteum, in this class may be ranked contusions, penetrating wounds and pressure. Heat and cold in extreme degrees, cold in conjunction with moisture, may be considered in all probability as by far the most common cause of the disease. It may be remarked that when the cause is intrinsic the bone is first attacked, whilst on the contrary when the extrinsic act the periosteum is first inflamed.

The progress of the disease is as follows. Inflammation

affecting the bone or periosteum pus will eventually be formed often in sufficient quantities to separate the periosteum from the bone, this cuts off the necessary supply of blood fr. the bone. But the surrounding healthy membrane still furnishes a scanty supply. Its chief source of nutrition being thus interfered with death must soon result.

The pus is contained in an abscess formed about it.— This abscess will suffer rupture in a certain time regulated by the acute or chronic character of the inflammation, or by the thinness or thickness of the parts covering it.— After having

escaped from beneath the periosteum, the matter makes its exit either through long and irregular openings or through short and direct ones. — It is not until the pus has escaped that an opportunity presents itself to observe the changes progressing in the bone. The first indication of approaching death of the bone is a change of color. It assumes a whitish tinge, is generally harder than natural, and if scratched does not bleed, showing plainly that its circulation has been materially and effectually interfered with. The presence of the bone now acts like

any other foreign substance producing a great amount of irritation, This is manifest by the change that takes place in the neighboring healthy bone. it becomes softer and swollen, more vascular. The cancelli which connects the dead with the living bone, become smaller and smaller, until they entirely disappear by absorption

Nature now makes an effort to rid herself of the foreign body. granulations shoot out from the surface of the living bone. filling the vacant space, and pushing the dead bone before them. Nature is not however satisfied

with this, but not unfrequent-
-ly sets up a process by which
new ossific matter is deposited
The office of assimilation is
executed by the healthy
bone. Hence numerous mi-
-nute spiculi of bone are
thrust out gradually en-
-larging until they come
in contact, they are then
united forming an entire
-ly new connecting portion
of bone. When the whole
thickness of bone has perish
-ed, the new bone is
produced much in the
same way, though in this
case the old is frequently
entirely surrounded by
the new bone. In the
bone thus newly formed

there will be a variable number of openings through which the pus escapes.

The bone at this part necessarially much enlarged owing to the swelling and overlapping of the new bone

<u>Diagnosis</u> In this as in other diseases, an actual observation of a few cases will enable the surgeon to detect its presence with much greater facility than the best possible description. It will be easily recognized if familiar with the symptoms, as there are but few diseases resembling it in this particular

It will be proper to detail briefly the principal sym-

-tions in the order in which they occur. The first indica-
-tion we have of its approach is pain, and the seat of this pain does not always correspond with that of the affection. Supposing the bone to be necrosed in the vacinity of a joint, pain will be experienced at that joint, and not at the diseased spot. Hence necrosis has been confoun-
-ded with rheumatism. But in these cases nothing more is necessary on the part of the surgeon, but care and patience to form a correct diagnosis. It will soon be perceived if the case be necrosis, that the

pain is now no longer in the joint, but that it has shifted its position to the actual seat of the disease. This transference of the pain occurs at or about the same time with suppuration. This can easily be ascertained by palpation, when usually evident fluctuation may be detected especially if the part be but thinly covered with muscle or integument. With respect to the pain when felt in the diseased spot, it is intense in degree. This pain arises in a great measure from the stretched condition in which the periosteum is kept by the

swelling. This membrane ordinarially insensible becomes acutely so when attacked by inflammation. This is the case with the bone also, in the healthy condition it may be sawed or cut without the production of the least pain, but when inflamed the most excruciating torture is experienced by the patient. It is remarkable that neither change of posture nor motion affect in the slightest degree the pain - on the contrary a marked change is produced in rheumatism by these means. A farther ~~[illegible]~~ ground of distinction is to be found in the attendant febrile ex-

-citement; In rheumatism the fever is a symptom of much later occurance than in necrosis, and still further in the last mentioned af-
-fection the fever is entire-ly symptomatic and of course greatly proportioned in degree to the violence of the local inflammation. Suppuration when it occurs decided at once any doubts the surgeon may have entertained as to the nature of the case. As an ordinary thing suppu-
-ration does not occur in rheumatism, and when pus is formed it is not a primary result but a secondary one. That is it may take place in rheuma-

-tion when through sympa-
-thy other than the prima-
-ry tissue becomes inflamed.
Suppuration in necrosis is
attended and announced by
the same constitutional symp-
-toms as in other inflamm-
-ations. There is not often however
a decided chill but merely a
rigor. The pain undergoes a
decrease. When the sheeps burst
there is more or less freedom
from pain, the membrane
being relieved from the
tense condition in which
it had been previously kept.

There is but one disease
of the bone itself so far
as I am aware, with which
necrosis is likely to be con
-founded.— Caries is a disease

of the bones ending like ne-
-crosis in the death of the
part. Now - the older surgeons
surgeons made no distinc-
tion between these two di-
-seases, but modern surgery
has shown them to be
essentially different in character
and to be produced by causes
materially different. Caries is
undoubtedly the immediate
result of a vice of nutrition
This is usually owing to some
degeneration in the blood,
an impairment of its nu-
-tritive qualities. This is
entirely constitutional.
Necrosis on the other hand
is produced by the nutritive
sources of the bone being di-
rectly and I may say com-

-- yielding out off — one disease arises from a [illegible] [illegible], the other from a total degeneration, there being no blood circulating through the part. But it is true, that in the earlier periods of the two diseases, much tact is requisite to diagnose between them — First because abscesses form in caries as well as in necrosis, and secondly because these abscesses are characterized by symptoms much alike — The pus however differs. that of caries is dark in color and evidently unhealthy, sanious — the matter of necrosis is manifestly more healthy in appearance, being seldom

much discolored, except it be in the latter stages— Perhaps the best ground of distinction is furnished the surgeon by the skillful use of the probe, A carious bone when struck with the extremity of the probe, communicates a sensation of softness and decay to the hand of the operator. The bone actually crumbles under the instrument,— A necrosed bone when probed is hard and gives the idea of firmness. it will give out a clear sound when tapped smartly with the instrument. The nature of the bone attached gives us at least presumptive evidence of the disease —

much discolored, except it be in the latter stages — Perhaps the best ground of distinction is furnished the surgeon by the skillful use of the probe, A carious bone when struck with the extremity of the probe, communicates a sensation of softness and decay to the hand of the operator. The bone actually crumbles under the instrument, A necrosed bone when probed is hard and gives the idea of firmness. it will give out a clear sound when tapped smartly with the instrument. The nature of the bone attacked gives us at least presumptive evidence of the disease —

-stitutional type, whilst that of necrosis is purely symptomatic as before stated.

Necrosis cannot be regarded as belonging exclusively to any age, though perhaps more frequently attacking the young than the old. Prof Nathan Smith from his extended experience informs us, that he has rarely seen necrosis in persons under five or over twenty two years of age — Of all the bones the tibia is the most liable to be attacked by this disease, and the femur comes next in the order of frequency — This preference exhibited by the disease for some of the bones rather than others possessing

the same structure is pro-
-bably owing to such bones being
exposed to the operations more
fully of exciting causes - Why
when the exposure is equal
in amount it should attack
a less vascular rather than
a more vascular has already
been accounted for.

Treatment of Necrosis. The treatment
to be adopted for the cure of this
disease will be regulated in
a great degree by the condition
of the patients general health.
In those cases in which the
disease is dependent upon
a general vice of the system
it will be proper to address
the remedies to the constitution
The remedies are of two sorts
therefore. general and local

the former are to be employed when a peculiar state of the constitution is active in pro-
-ducing or favoring the diseased action, and the latter to be em-
-ployed without reference to the cause, at the discretion of the surgeon. The local treatment is the most efficacious in ares-
-ting the spread of the disease. If necrosis has occured in a per-
-son of a robust constitution and plethoric habit, attended with a high degree of inflam-
-matory excitement, it will be proper to resort to the anti-
-phlogistic plan of treatment. Blood letting is the most effi-
-cacious of these means and should be pretty freely per-
-formed, by making a free

orifice in a vein of the arm.
In addition to this saline purgatives may be exhibited especially if the bowels are at all irregular, so as to produce a considerable number of watery evacuations. In the use of purgatives we are to be governed in a great measure by the seat of the disease. If for example it affect the bones of the cranium they should be freely employed on the principal of revulsion In this case the more drastic purgatives will be required as scammony or gamboge The more actively the patient is purged in these cases, the better, as metastasis is to be feared. The bleeding may be

probably inflict injury by ab-
-stracting blood from the part
already inadequately supplied with
that fluid. The patients strength
will have materially suffered
in these cases owing to the
inefficient manner in which
nutrition is carried on. The
indications then are to improve
the nutrient qualities of the
blood, and to buoy up the pa-
-tients failing energies. The best
remedies which can be admin
-istered for these purposes are
some of the various preparat-
-ions of iron, of these the Sul-
-phate or the syrup of the Iodide
are perhaps the best. Attention
should at the same time be
paid to the diet, which should
be of the most nourishing kind

The bowels must be kept regular by means of laxatives. In addition to this general treatment local applications have been recommended. for the purpose of relieving the pain. they are rarely however of any material benefit. Blisters to the part and kept open by some irritating ointment are highly spoken of by some, That which is most useful, is when the case is seen early, an incision through the soft parts down to the bone, this will often prevent the bone from perishing. and will almost be sure to arrest its further death, if that has begun. In case the disease has existed some time, and there is a sequestrum present, the surgeon should make

an incision down to the bone, then either with a trephine or chisel enlarge the openings in the new bone. When this has been effected the surgeon endeavors to remove the sequestra by means of forceps. He seldom succeeds however in abstracting the whole of the dead portion at one operation. The attempt must therefore be repeated until the fragments are all extracted, when the fistulous openings in the new bone and soft parts will generally heal readily and a cure is perfected —

A

Clinical Report

of a case of disease

submitted to the examination

of the

Provost, Regents and Faculty

of Physic of the

University of Maryland

for the degree

of

Doctor of Medicine

by

Peter Wood Hawkins

of

Charles County

Maryland

1852

Gentlemen.

I submit for your examination, a clinical report of six cases of disease, drawn up from personal observation, which were admitted and received medical treatment in the Baltimore Infirmary, during the time I was resident student in the Institution.

The first case to which I will invite your attention is that of Hemiplegia. The patient was a colored woman, belonging to Mr Carrol near this city. She was admitted in the Baltimore Infirmary for medical treatment, on Monday, May 26th 1851. Her occupation had been that of a cook, to which she had been accustomed from childhood. She stated, that she was the mother of six children, her parents, two brothers and three sisters all living and in the enjoyment of good health.

On the Friday week previous to her admis-
-sion in the Infirmary, whilst engaged in
her usual occupation as cook she was sud=
-denly attacked with dimness and obscu=
-rity of vision, vertigo and lightness
about the head. These symptoms of
approaching disease continued more or
less intense during the day but not so
violent as to cause her to cease from
her occupation;- she still continued
to be employed about her duties. She stated
that her previous health had been good,
with the exception of occasional violent
headaches, in consequence of which she
was sometimes compelled to give up
her occupation and take to her bed.
On the subsequent day (Saturday) she still
continued about her duties as cook
but still laboring under the same
unpleasant sensations of giddiness, light-
-ness of head and dimness of vision

On Sunday, in consequence of the increased violence and severity of her symptoms, she was compelled to take to her bed and a physician was called to see her, who prescribed for her, but without any apparent benefit. She remained confined to her bed from Sunday until the following Thursday, without any marked or decided change in her condition, still suffering from the same disagreeable symptoms, when it was discovered that she was laboring under paralysis of her right arm and leg, having lost all power of motion in her arm and her leg capable only of very partial motion. She complained of a sensation of chilliness affecting the right side of her head and face. There was little or no alteration in her condition from Thursday when it was ascertained that she was hemiplegic, to Monday, the

day of her admission in the Infirmary, except a gradual increase of debility. She stated that she had been able every day to sit up a little previous to her entrance into the house, but was then unable to do so, as she expressed it, "from want of strength." Previous to her admission she had been directed to have wine and porter. She stated that she had labored under double vision before entering the house; which was not the case subsequent to her admission, except with objects at a distance. We found her, on her admission in the Infirmary with cold and chilly sensations running through the right side of her head face and body, her vision somewhat impaired, the sight of her right eye being more affected than that of her left. Her tongue when protruded inclined towards the affected side, her right

arm completely paralyzed being entirely incapable of motion; her right leg capable of very slight motion only. Her articulation was imperfect so much so, that she was with much difficulty understood. She complained much of profuse sweating and of its augmenting daily about noon just previous to which, the chilly sensations, before referred to, became more distressing and intense. Her bowels were costive having had no operation for two days. pulse 108 per minute quick and ~~feeble~~ tongue a little whitish. no pain in any part of her body, except in the paralyzed arm, which was sharp and shooting. the affected leg free from pain. She was seen and attended by Prof Chew who prescribed for her.

℞ Calomel. grs v
Pulv. Rhei grs x
and this to be followed in six hours, by Oleum

Ricini - ℥ss. In addition she was directed to be freely cupped along the spine and especially along the upper portion. She was repeatedly cupped at intervals of twenty-four or thirty-six hours, during the first week or ten days after her admission, and in connection with this, she was put on divided doses of Mercury, Ipecac and Bicarbonate, until the mercurial influence was fairly established, when all medical treatment was suspended and our trust was placed in the powers of nature and a proper regimen. Her condition was in no wise improved when she left the Infirmary June 21st, nearly four weeks after her admission. The pathological condition of the above case was probably that of cerebral or spinal hemorrhage causing pressure on the structures around and thereby producing interruption of nervous function. The supposition of the existence of hemorrhage, either spinal or cerebral,

is strengthened and derives support from the fact of the extreme obstinacy of the symptoms, and the patient receiving no benefit whatever from remedial measures. The object of the treatment, to which the patient was subjected, was of course, to remove all congestion about the brain and suppuration of the spinal cord, and to produce resorption of the effused fluid, whatever it may have been, and consequently the removal of pressure, so as to allow of the reestablishment of nervous function! The plan of treatment best calculated to accomplish this object and which seemed to be the only rational treatment, consisted in strong revulsion along the neck and spine, by means of cups, cathartics to act on the bowels, and the production of ptyalism by the administration of Mercury.

The next case to which I will call your attention, is that of Chronic Peritonitis. The patient was a colored boy - aged eighteen years, who entered the Infirmary June 20th 1851. He stated that he had been in the service of Mr Van Rockley of St Timothy's Hall, employed in the occupation of hostler and carriage driver, and that he was one of six children, all living except two, did not know of what disease they died, parents living and in the enjoyment of good health. He stated, that at Christmas last, his attention was directed to a swelling of the abdomen a little below the umbilicus, which continued for about a week before commencing to give pain and uneasiness; and that he had experienced no ill health, previous to the appearance of the swelling, which was preceded by unpleasant and indescribable sensations in his abdomen. A few days subsequent to the abdominal

swelling making its appearance, he was taken with a cough, which continued to annoy him about a month and then left him; and it had not recurred at the time of his admission in the Infirmary. He also stated, that he had suffered no pain or any unpleasant sensations in any part of his body, except in his abdomen, over which there was much pain and tenderness, which were greatly augmented on pressure. Previous to his entrance in the house, he had been attended by Prof. Smith, who, as he stated, prescribed for him medicine in a liquid form, and an ointment was directed to be rubbed over the abdominal swelling, supposed to be a tartar-Emetic ointment, which produced a pimpus-tulation; and after this, a warm anodyne poultice was applied. His mother stated, that after the production of pustulation, his condition became much improved, which continued about two weeks, at the expiration of that

-time" something seemed to give way in his abdomen (as his mother expressed it) and there was a discharge of about a gallon of blood and purulent matter, most offensive in its character. The discharge from his bowels ceased in about twenty four hours and did not recur. We found him on his admission in the Infirmary with a tense swollen and tympanitic abdomen and exceedingly painful and tender on pressure. There was no marked or evident derangement about his lungs. There was great anaemia, evinced by the pale and blanched appearance of the labial and conjunctival mucous membranes. There was also considerable emaciation; pulse 120 per minute and feeble, extremities cool appetite much impaired, bowels regular. He complained much of prostration and want of strength. He was placed under the care of Prof Chew who directed for him, Syr. Ferri Iodid. gtts X. ter die. a sinapism over abdomen and nutritious diet. His condition was not

materially improved by these measures, he still continued to complain of much abdominal pain and uneasiness, increase of debility and fullness, impaired appetite, want of sleep etc. He was directed to have in addition to the above remedies, an ointment composed of the following

℞ Iodid. Potass. ʒj } A small portion,
Iodine grs X } rubbed over abdominal
Cerat. Simpl. ℥iss. } tumor ter die,

but the application giving him intense pain, it was directed to be withheld.

The abdominal swelling soon began to point a little below the umbilicus, and continued to do so for several days, when it ruptured and discharged a large quantity of seropurulent matter, but without any abatement of the abdominal symptoms and very little diminution in its size. The discharge continued for several days becoming exceedingly offensive and assuming somewhat a fecal character. A probe was introduced and

pushed its entire length into the abdomen without encountering any resistance, and we were lead to suppose, that there existed a perforation of the intestine and that the probe entered the gut. The same treatment was still continued, consisting of Tyr. Iodid. Ferri. gtts x ter die, nutritious aliment and in addition, Port Wine as a stimulant tonic, and a warm poultice kept constantly applied over the discharging orifice. Under this plan of treatment, there was no marked or evident improvement in his condition, the powers of his system seemed gradually to be sinking, a copious discharge of a most offensive character was still kept up from the abdominal swelling, which seemed to augment very materially his already existing prostration. Oedema of his face, eyelids feet and ankles now began to make its appearance, his sleep much disturbed by abdominal pain, little or no disposition for food, feeble and frequent

pulse; cool extremities and clammy skin. But what was most surprising and remarkable, during this condition of things; his bowels remained regular, and his evacuations presented a healthy appearance. Each movement of his bowels was attended by severe abdominal pain. There being no apparent amendment in his condition; but rather a gradual and steady increase of unpleasant symptoms. he was directed to have in addition to the above treatment. Sulphas Quinia gro xvj made into pills viij, and one to be taken every four hours. This plan of treatment was strenuously pursued, but apparently with no salutary effect. Remedial agents seemed incapable to arrest the sinking energies of his system; weakness and prostration gradually increased notwithstanding every effort and exertion to support and keep up the flagging powers of nature. Each day he became more feeble and exausted; his bowels at length became

-loose evacuations frequent thin and watery and he expired, July 4th, nine o'clock P.M. fourteen days after his admission in the Infirmary. I regret to state that there was no opportunity afforded of making a post mortem examination, and consequently no means of ascertaining the exact pathological state, which was most probably tuberculous inflammation of the peritoneum.

- - - - - - - - - - - - - - - - - -

A case of Colica Pictonum.

The patient was a native of Ireland, his occupation that of a painter, aged twenty-five years, and was admitted in the Baltimore Infirmary, May 19th 1851. He stated that he had resided in this country about three years, and that he had been in the enjoyment of good health since he left his native country. He also stated, that he was attacked in London in 1844, whilst employed in his occupation as painter with

severe and intense pain in his stomach and bowels, constipation, nausea and vomiting. He did not recollect the other symptoms. He was taken to the Royal Infirmary and placed under the care of Sir Benjamine Brodie, under whose supervision he soon recovered his health. From that time his health had been good, until about two years previous to his present attack, whilst in New Orleans, he had yellow fever, from which he soon recovered under medical treatment. In November last whilst in Baltimore, he was suddenly attacked with acute and violent abdominal pain attended with vomiting and obstinate constipation. He stated that his bowels were very insensible to the action of purgative medicines. His attending physician pronounced him to be labouring under an attack of lead colic, and treated him accordingly. The remedies he

remembered taking were Epsom salts and castor oil. He had a similar at-tack in Lancaster Pa. about the twenty-fifth of March last, which commenced with severe pain and uneasiness of stomach and bowels, constipation and vomiting of a small quantity of blood. When admitted in the Infirmary, we found him laboring under symptoms of obst-nate constipation, excruciating pain in his abdomen, of a twisting and spas-modic character, coming on in paox-yysms, aching and soreness in his limbs much weakness about the wrists, a bluish tint about the gums nausea and occa-sional vomiting. His pulse was some-what excited, skin dry and harsh, tongue coated with a yellowish fur and tem-ulous when protruded, abdomen hard to the feel and retracted, urine scar-ty and countenance expressive of much

pain and suffering. He was seen by Prof Chew, who directed him to have Alum ʒß every three hours, and this to be followed at the expiration of eight hours, if no evacuation from his bowels had been obtained by that time, by

℞. Pulv. Opii gr j
Olei Croton gtt j } every two hours.

The Alum was given as prescribed but without any evident effect, and was followed as directed by the Opium and croton oil, which also failed to produce the desired effect. He was again seen on the following day by Prof Chew who prescribed for him the following

℞. Extract. Belladonnae. grß.
Submuriat. Hydrarg. grs xij

and this to be followed in four hours after, if no evacuation from his bowels had been produced, by the following

℞. Oleum Ricini. ℥j

Oleum Terebinth. ℥j
Oleum Ricini gtt j.
and if these should fail to operate on his bowels, he was directed to have an enema consisting of the following
℞. Decoct. Lini ℔j
Oleum Terebinth. ℥j.
All of the above remedies were administered, but were ineffectual to produce the desired result. His bowels still remained costive, he still suffered much from abdominal pain, nausea and aching in his extremities and back. The enema was then administered and with the happiest result. About five minutes after its administration his bowels were freely and copiously moved, with a very prompt and decided mitigation of all unpleasant symptoms. His bowels were subsequently acted on by mild aperients, and he

was directed the following, every four hours

Ry. Camphor gr v.
Alum. ℨß
Emul. ℥ j.

which he continued to take for several days, when he left the Infirmary perfectly free from disease.

- - - - - - - - - - - - - - - -

A case of Rubeola.

The patient was an Irish boy aged twelve years admitted in the Infirmary for medical treatment June 11th 1851. He stated that he had arrived in Baltimore about a week previous to his admission in the Infirmary, and that he was not aware of having been exposed to the influence of any contagious disease, prior to his leaving Ireland or on shipboard during his passage to Bal-

-timore. By his account of himself he times, he was in the enjoyment of good health up to the day previous to his entrance into the house, when, as he stated, he became affected with great debility, lassitude, aching and pain in his back and limbs, general uneasiness, headache, nausea epigastric pain and profuse perspiration followed on the subsequent day (if his statement be correct) by an eruption of a bright red color. We found him on his admission in the Infirmary with his face much swollen and red, his skin covered with a bright and red colored eruption, somewhat elevated and rough to the touch, collected together in clusters, assuming somewhat a crescentic form, and the intermediate portions of skin presenting a healthy appearance. The eruption was more abundant on the face, upper

extremities and chest, gradually growing less distinct as it descended. The eruption however became more distinct and abundant on the lower parts of his body, after the lapse of a day or two, when it had commenced to fade away on his face and chest. We found him also labouring under symptoms of catarrh, indicated by cough attended with a yellowish mucous expectoration, smarting redness of the conjunctival mucous membrane and coryza. His pulse was frequent and full, skin dry and hot, tongue coated with a yellowish fur and red along its tip and edges, and its papillae enlarged. He complained of much prostration of strength, thirst and loss of appetite. His bowels were rather relaxed but scarcely enough so to constitute a diarrhoea. He had had no chill previous to his admission in the infirmary, noticed

-ing of skin and had slept well. She was placed under the care of Prof. Shew who directed for him the following

℞ Antimonii et Potassæ tartrat gr j
Emul. Gum Acaciæ ℥ss
℥ss every two hours.

and in addition to the above he was ordered low diet, quietude both of mind and body and rest in bed. She was again seen on the following day, by Prof. Shew who directed him to have the above emulsion every three hours, instead of every two as first directed. Under the above plan of treatment there was a very marked and decided improvement in his condition. His pulse became softer and less frequent, heat and dryness of skin diminished and abatement of febrile excitement. Three days subsequent to his admission (June 14th) the emulsion of tartar-emetic was ordered to be suspen-

-ded and he was directed to have as before, low diet, rest in bed and quietude of mind and body. He still continued to improve. The eruption had now (June 15th) commenced to disappear, beginning to fade away first, from his face, chest and upper extremities and at a later period from the abdomen and lower extremities, leaving the skin red, but cool and moist, the cuticle separating in furfuraceous or bran-like scales. The tongue also presented a more healthy appearance, becoming cleaner and less red, papillae less enlarged, appetite improved and catarrhal symptoms greatly diminished, expectoration thicker and more opaque. He still went on to improve for a period of four or five days, when it was discovered that he was labouring under considerable febrile excitement, indicated by a quick, frequent and full pulse, heat, redness and dryness of skin, and along with

these, there were some stupor and drowsiness and a strong disposition to sleep, from which he was with difficulty roused. He was directed to have an aperient, low diet and rest. At the expiration of twenty four hours all untoward symptoms had nearly disappeared, there was little or no fever, skin cool and moist and no evidences of stupor or drowsiness. and he left the Infirmary (June 19th) perfectly restored.

- - - - - - - - - - -

A case of Acute Dysentery.

The patient, a colored man, aged twenty one years, was admitted in the Baltimore Infirmary for medical attendance, Friday, June 27th 1857. He stated, that he was a resident of Baltimore, his occu-

-pation that of a block and pump maker, and that he had been in the enjoyment of good health up to Monday June 23rd, four days previous to his admission in the Infirmary, when he was taken with a dull aching and occasional griping pains in his abdomen, attended with discharges from his bowels, nausea and slight vomiting. He attributed his attack to his having walked some distance in the country the day previous to his indisposition and being much exposed to the hot sun. Being thirsty fatigued and in a state of profuse perspiration, he imprudently drank very abundantly of cold water from a pool which happened to be near, and immediately after he partook heartily of wild berries, the name and nature of which were unknown to him. On the following day (June 24th) his in-

-disposition was much increased, his calls to stool frequent, the discharges small and scanty, and attended by much tenesmus and severe tormina augmented in intensity at each evacuation. He stated that he did not discover any blood in his evacuations until the third day of his attack. Previous to that time, the discharges from his bowels had presented a whitish and slimy appearance. These symptoms continued to augment in severity and violence from day to day until his admission in the Infirmary, the day June 27th. If his statement be correct, he averaged not less than two operations on his bowels for each hour during the day preceding his entrance in the Infirmary. We found him on the day of his admission, labouring under all the symptoms already referred to

his calls to stool being very frequent, as often perhaps as once or twice or more each hour, the discharges from his bowels scanty and consisting of white mucus mixed with blood and of a strong and exceedingly unpleasant odor. He complained much of severe griping pains in his abdomen, involuntary straining and of a sharp burning sensation in his rectum. His pulse was seventy six per minute, soft and regular, respiration natural, skin cool but hard, tongue coated with a white fur, thirst and loss of appetite, and great tenderness and pain along the course of the Colon much increased on pressure. He was placed under the care of Prof. Shew who directed for him the following

℞. Hydrargy. Chloridi Mitis. grs viij
Pulv. Opii
Pulv Specac. āā grj

and the above to be followed in eight hours, in case no fecal evacuation had been produced in that time by—

℞. Oleum Ricini ℥ss

Tinct Opii gtts X

He was also directed to have at bed-time, in case the discharges from his bowels had assumed a fecal character the following. ℞. Tinct. Opii gtts XXV

Vin. Sheree. gtts XX

He was ordered low diet, rest and quietude in bed and a light bran poultice was applied over his abdomen with directions to be changed as soon as it became cold. The first prescription ordered, was administered, but failing to produce fecal discharges, it was followed as directed, at the expiration of eight hours by the second, and this also failing to produce fecal evacuations, the third was omitted as ordered. He was again

seen on the following day, June 28th, by Prof Chew, and as there was no marked or decided improvement in his condition, he was directed to have the following

℞. Hydrargy. Chloridi Mitis, grij
Pulv Opii
Pulv Sperac ãã grj

and the above to be followed in six hours, by a tablespoonfull, every two hours, of the following. ℞. Olei Ricini ℥ss
Tyr. Rhei Aromat. ʒj
Tinct Opii gtts XXX
Aqua Camph. ʒij
Creta praeparat. ʒij

On the subsequent day (June 29th) there was a very marked improvement, the discharges from his bowels had become much less frequent and assumed a fecal character, containing little or no blood and consisting chiefly of whitish mucus mixed with fecal matter. Abdominal pain and

tenderness along the course of the colon had greatly diminished; he complained only of a slight pain of a cramping character and some little tenesmus. There was no febrile excitement, skin moist and pleasant, tongue still somewhat coated, no thirst, and appetite improved. The mixture prescribed the previous day and from which he seemed to derive such prompt relief, was directed to be suspended, and only to be repeated in case of the recurrence of dysenteric symptoms. He was directed to have after each operation, vinct opii gtts X. On the subsequent day (June 30th) he was still going on to improve, the discharges from his bowels being decidedly fecal, but somewhat natural; tongue commencing to clean, no pain; appetite much improved, and he felt himself so much better that he expressed a desire to leave his bed

He was put on an anodyne and astringent treatment consisting of the following

℞. Tannin — grs XX } one after
Pulv. Opii grs ss } each operation
: pilulas vj.

He still continued to improve under the above treatment and the observance of proper diet, when he left the house, July 8th, eleven days after his admission, perfectly restored to health.

A case of Acute Dysentery assuming a chronic form and terminating fatally.

The history of the case is as follows:

Patrick Sherry aged thirty-four years, a native of Ireland, was admitted in the Baltimore Infirmary to receive medical aid, on Tuesday July 1st 1851. He stated that he had been in this country about four months, his occupation that of a laborer, and that he had been

in the enjoyment of good health, with the exception of a slight cough from which he had been suffering about six weeks, up to Saturday June 28th, when he was taken with a sensation of shivering and coldness aching in his back and limbs followed by severe headache, increased heat of skin acceleration of pulse, much thirst, nausea and vomiting, severe abdominal pain, and frequent discharges from his bowels presenting a bloody appearance and attended by severe pain and tenesmus. He also stated that he was a temperate man, of good habits and that he had no recollection of having exposed himself to cold, dampness or night air. On the day subsequent to his attack (June 29th) all of the above symptoms were more intense, his calls to stool more frequent and the discharges still containing a considerable quantity of blood and slime. On the following day (June 30th) his condition was in

nowise improved and if there was any change his symptoms were rather augmented than mitigated in severity. When admitted in the Infirmary (July 1st) we found him with a firm, tense and frequent pulse, tongue coated with a thick yellowish fur and rough to the touch, with a hot and dry skin, considerable thirst, loss of appetite, his calls to stool exceedingly urgent and frequent and attended with excessive straining and tormina, the discharges from his bowels containing much blood and whitish slime mixed with fecal matter, occasional vomiting and extreme tenderness over abdomen which was greatly augmented on pressure. He was seen by Prof Chew, who directed that he should be bled from the arm, until a decided impression was produced on the pulse, and prescribed the following

℞. Hydrargy. Chlorur. grs X
Pulv Opii grj

Pulv Ipecac- grj; with the direction that it should be followed in eight hours, in case it should fail to operate on his bowels, by the following Rp. Oleum Ricini ℥fs

Tinct Opii gtts X.

A warm poultice was applied over his abdomen and he was directed to have low diet and perfect quietude of mind and body. On the succeeding day (July 2nd) there was little or no improvement in his condition, he still labored under the same unpleasant symptoms undiminished in intensity; he appeared rather more debilitated than he was the day previous, pulse less firm and tense. He was directed by Prof Shew to have a tablespoon full, every two hours until fecal evacuations should be produced, of the following. Rp. Oleum Ricini ℥j

Syr. Rhei Aromat. ℥j

Tinct Opii gtts XXX

Aqua Camph- ℥ij

July 3rd. There was no very decided improvement in his condition, perhaps he might have been pronounced a little better. His pulse was still weak and frequent 118 per minute; his evacuations contained less blood and slimy mucus, and more fecal matter, but he complained much of abdominal pain and tenderness and involuntary straining. His skin was cool, capillary circulation rather feeble, tongue still yellowish, dry and rough to the touch, slight cough and stomach distended with gas, which readily passed off by belching. The mixture, prescribed the day previous, was ordered to be suspended, and he was directed to have Hope's Mixture every four hours, and the following, ℞. Tannin ʒfs } into vj pill, one
Pulv. Opii grfs. } every two hours.
He was again seen by Prof Chew on the afternoon of the same day, and the pills of Tannin and Opium were ordered to be suspended. Hope's Mixture continued with the addition of

℞. Decoct. Haematoxyli. ℥j }
Camph. Tinct Opii ʒj } every three hours.

He was directed to have a warm sinapism applied over his abdomen. July 4th & 5th.) There was no marked or decided change in his condition, pulse still small and frequent ranging from 112 to 118 per minute, capillary circulation quite feeble indicated by coolness of surface especially of the extremities, the discharges from his bowels frequent and urgent, consisting in part of fecal matter and mucus mixed with blood, pain and tenesmus present and much thirst. The same course of treatment was directed to be continued, and in addition he was ordered Ceratum Cantharidis, applied over abdomen. His symptoms during the forenoon of the following day (July 6th). seemed to be aggravated. The state of his skin and especially of his extremities was cool, amounting almost to coldness. debility augmented to an alarming

degree. pulse very feeble, discharges from his bowels frequent and attended with excessive pain and tenesmus. In this condition he was seen by Prof. Chew, who directed the continuation of Hope's Mixture every four hours, and decoct. Haematoxyli, which he had previously prescribed, to be discontinued. He was directed to have a tablespoon full every hour, except the hour in which he took Hope's mixture, of the following ℞.

Ext. Hyoscyami	ʒij
Creta Praepart.	ʒiij
Oleum Menthae	gtt i
Pulv. Alb.	ʒij
Aqua-	℥viij.

He was also directed to have Port Wine as a stimulant tonic and sinapisms applied to his extremities. Under this treatment there was a marked improvement, his pulse became fuller and less frequent - his capillary circulation more active -

his extremities warm and pleasant, his evacuations rather less frequent and more fecal in their character. She was again seen by Prof Chew in the afternoon, and was directed to have as an injection after each operation, the following.

℞. Julep. Rhei grs X
Tinct Opii gtt X
Mucil. Amyli. ℥j.

July 7th. During the forenoon there seemed to be some improvement, but towards evening his surface and especially his extremities became cooler than natural, his capillary circulation less active, pulse increased in frequency and feebleness, the discharges from his bowels frequent and consisting of mucus and fecal matter and containing no blood. Continuation of same treatment as previous day.

July 8th. Symptoms and treatment same as day previous. In forenoon of the following

days July 9th. there seemed to be some amend-
-ment in his condition his capillary circu-
-lation became rather more active, his pulse
somewhat fuller. his tongue presented a
more healthy appearance, but towards
evening this change for the better was not
so apparent. He complained of excessive
abdominal pain and tenesmus. his calls to
stool became more frequent, pulse weak
and flagging, his abdomen distended and
tympanitic. He was visited by Prof Chew
who directed the continuation of the
same internal treatment, and in stead
of the enema of Sulph. Zinc and Tinct.
Opii, he was ordered to have, after each oper-
-ation, as an enema the following

℞. Acetas Plumb. grs X
Tinct Opii gtts X
Mucil. Amyli ℥j

Port Wine as a stimulant tonic, as
before. On the subsequent day (July 10th)

being in no respects improved but still presenting many unpleasant symptoms such as severe abdominal pain, tenesmus, tympanitic abdomen and much prostration, his treatment was directed to be changed. Hopes Mixture, which he had been taking for several days, was suspended and in its stead he was ordered to have the following ℞ Acetas Plumb grs xxiv

Pulv Opii grs iv

Pulv Specac grs iv

made into pills viij - one to be taken every four hours, alternating with Decoct. Haematoxyli ℥ij. Enema same as previously directed. There was no improvement under this plan of treatment on the following day (July 11th) - he still presented the same untoward symptoms, and passed several involuntary stools in bed during the day. He was directed to have the same treatment as on the previous day

with the exception of the discontinuance of the enema of acetate of lead and tincture of opium, and the substitution of an enema after each operation consisting of the following ℞. Nit Argent. grs IV

Tinct Opii gtts XX

Mucil. Amyli ℥j.

July 12th. There seemed to be some slight improvement in his condition; his capillary circulation was rather more active, his bowels more quiet, pulse less frequent but still very feeble, there was a strong disposition to sleep and he passed as on day previous, several involuntary stools in bed. He was seen by Prof Chew who directed him to have every second, third or fourth hour, according to the effect it should produce on the brain the following. ℞. Pulv Doveri grs X

Acetas Plumb. grs iij, and if his stomach should become irritable, the

above was to be omitted and in its place he was to have Opii grij. The acetate of lead, Opium and Specac which he had been taking during the preeding two days, were directed to be omitted. The Dovers powder and acetate of lead were found to produce no ill effect upon the brain and were consequently continued. Enema same as previous day and Port wine as a stimulant tonic. His condition was very unfavorable the succeeding day (July 13th.) indicated by great looseness of bowels, increased debility, frequent and feeble pulse inactivity of capillary circulation, evinced by coolnes of skin and discoloration on pressure, severe pain and tenesmus, tongue dry, brownish and rough. He was seen as usual by Prof. Shew, who directed the injection of nitrate of silver and tincture of Opium to be omitted and as a substitute he was ordered to have as an injection after each operation the fol=

-lowing ℞ Acetas Plumb. grs X
Tinct. Opii gtts X
Mucil Amyli ℥j. He was also directed to have every three hours the following ℞ Acetas Plumb. grs iij
Pulv Opii.
Pulv Ipecac ā gr j. and in case it should sicken his stomach, the interval between the doses was to be increased. The decoction of logwood was discontinued and in its stead he was ordered Mistura Cretae Comp. after each operation.
July 14th During the forenoon he vomited occasionally, and the interval between the doses was lengthened as directed. Toward evening there was an evident mitigation in his symptoms, his skin which had been dry and cool became warm and pleasant indicating a more active capillary circulation, bowels more quiet and easy, pulse fuller and less frequent, tongue a little moist.

and he expressed himself decidedly improved. Continuation of same treatment as day previous. In the forenoon of the following day (July 15th) his symptoms seemed to be somewhat aggravated, he complained of considerable abdominal pain which ceased towards evening when there seemed to be an improvement in his condition. Continuation of treatment. He appeared to be doing well July 16th, no very untoward symptoms present, slept well previous night, complained of no pain, skin pleasant and warm, bowels comparatively quiet. He was directed to have in addition to previous treatment, Chapman's Mixture. There seemed to be a gradual amendment in his condition from July 17th to July 24th. During this period he complained of less abdominal pain, bowels more quiet, his pulse was less frequent and stronger, skin moist and pleasant indicating actiu=

-ity of capillary circulation, tongue moist and cleaner, there was no evident increase of debility or emaciation, and his condition was altogether more favorable than at any period subsequent to the disease assuming a chronic form. Continuation of treatment from July 13th, with the addition of Chapmans Mixture and Mistura Cretae Comp. This course of treatment was directed to be changed in part on the 24th ins. The pills of acetate of lead, Opium and Specac, were ordered to be omitted, and he was directed to have the following ℞. Julep. Cretae - grs 1/4

Pulv Opii grs 1/2

every six hours. Chapmans Mixture, enema of acetate lead and tincture of Opium and compound chalk mixture continued as before. There was an evident change for the worse in his condition July 25th. He presented none of those favorable indications, which had led us to hope during the previous week, for

a permanent recovery. He complained of severe abdominal pain and tenesmus, tongue brownish and dry, pulse more frequent and feeble, abdomen greatly retracted, small and frequent discharges from his bowels, nausea and vomiting, skin clammy and cool, and increased debility. The sulphate of copper and opium, which had been ordered the day previous, were omitted, and he was directed to have every four hours the following

℞. Acetas Plumb. grs xij ⁄ Pulv Opii grs iij ⁄ Pulv Ipecac. gr. j. ⁄ Chapman's

Mixture continued as before, and decoction of logwood in place of compound chalk mixture. He was also directed to have, after each operation, the following enema, ℞. Acetas Plumb. grs x

Tinct Opii gtts x

Mucil. Amyli ℥j.

July 26th. A kind of eruption made

its appearance on his skin but not so distinct as to enable us to form any accurate diagnosis as to its true nature, evacuation from his bowels somewhat less frequent, but he still presented the same unfavorable symptoms as on the previous day. Continuation of same treatment as previously directed with the addition of wine and water. July 27th. Decided change for the worse, pulse frequent and thready, increased prostration, almost continual emesis rejecting every thing from his stomach, eruption sufficiently distinct to be diagnosed as Rubeola. He probably contracted the disease from a patient who had occupied a bed in the same apartment, about a fortnight before. There was a cessation of emesis towards evening. Condition, July 28th) same as preceding day, with the exception of the emesis, which did not come on until 6 o'clock P.M. He was directed

to have in addition to previous treatment as a strong stimulant a tablespoon full every hour of the following ℞. Car. Ammon. ʒj

G. Acacia.

Sach Alb. āā ʒij

Aqua. ℥vj

He was unable to retain but little, if any of the above, and it was evident that he was rapidly sinking. Brandy and water in small and repeated doses were administered, but to no purpose, and he expired about 3 o'clock A.M. July 29th.

Post-mortem appearances.

The mucous membrane of the rectum and lower portion of the colon, was found thickened and ulcerated. The ulcerations were not confined to the mucous coat, but extended also to the muscular, and presented a rough and irregular appearance. A few of the ulcerations were covered with

a whitish semiorganised exudation. There was no enlargement or softening of the mesenteric glands. The liver presented a healthy appearance.

Peter Wood Hawkins.
Charles County.
Maryland.

An Inaugural Dissertation On Puerperal Peritonitis

Submitted to the Examination of the Provost Regents & Faculty of Physic of the University of Maryland For the Degree of Doctor of Medicine By

William Grey, Jr. Salisbury Md.

Puerperal Peritonitis.

I shall speak of this disease, as one of the varieties, of that disease so commonly known as child bed Fever. This variety, was the one observed, in the epidemic, in London, at Aberdeen, Leeds, Edinburgh, and Dublin; and it has occurred in other epidemics. It may be defined an inflammatory disease, affecting that portion of the peritoneum, covering the uterus, primarily, generally involving the uterine appendages, and extending over the remaining portion, of the serous membrane. The attack may commence before delivery, but more generally from one 24 hours to three days, afterwards. It may attack women of the most robust, as well as the most delicate habit; and it may occur equally as often after an easy and natural birth,

as after a tedious or instrumental, delivery. It has been noticed by those, who, have made this a subject of research, that the sooner after labor. it appears, the more severe ~~will~~ will the symptoms prove, and the result more fatal.

Symptoms It is ushered in with shiver-ing. sudden rigors, pain or some variation in the pulse, to which inflammatory fever succeeds, heat of skin. thirst, flushed, face, quickened pulse. The heat of the skin soon subsides, and sometimes during the disease, does not exceed the natural standard. To these symptoms, are added nausea, vomiting, and pain, in the head, with increased sensibility of the uterus, Pain in the abdomen soon attracts notice it generally com-mences in the hypogastrium, and frequently you find it in one of the

illiac regions, gradually radiating, over the abdomen. It may be slight or severe, continuous or in paroxysms, the intermission being more remarkable, as the disease progresses, but the pain returns with increased violence, after the remission. Along with the pain we have more or less, tenderness of the abdomen, this sensibility, becomes exquisite, as the inflammation extends, so much so that the patient; can not bear the slightest pressure; even the weight of the bed clothes is intolerable, you find your patient lying on her back, with the knees drawn up, in order to relax the abdominal muscles. The enlarged uterus can frequently be felt through the integuments, above the brim of the pelvis, at an early stage of the disease, The abdomen becomes distended, with air which may be contained in the intestines,

of peritoneal sac, this tumefaction depends upon two causes, the one inflammation of the intestines, which most always occurs, as the disease advances. the other effusion of fluid into the peritoneal cavity, which generally takes place before death. The pulse in many instances is unnaturally rapid, sometimes small and wiry, and is liable to modifications from treatment, and the peculiar character of the epidemic, you will find it ranging, from one to 140 in a minute, and Dr Churchill says towards the termination, to 160 and upwards. The effect the disease has upon the bowel discharge varies, in the majority of cases it continues to flow as usual. In the first stage, some are of the opinion that it infrequently is not diminished, yet we finde a complete,

In pneumonia the inflamatory symp-toms run high, and returns, when the symptoms abate. The breasts soon become flaccid, in the majority of cases. it is remarkable that a great number of patients, lose all interest in their infants, and even refuse to give them suck. The tongue is gener-ally coated with a whitish fur in the centre, but you will find it red around the edges. The bowels share in the irritation, and diarrhoea results, but often they are in the opposite condition, requiring purgatives. The urine is turbid, or high colored, and somewhat diminished in quantity, sometimes total inability to void it; requiring the ~~use of the~~ use of the catheter. Through out the disease the skin is generally dry and of the natural heat; but as it

approaches to a fatal termination, it becomes cold and clammy, the hands and feet are cold, very often from the onset of the disease, you will hear your patient complaining of the coldness of her extremities. The intellectual faculties are seldom disturbed, the patient retains her senses until the last, but we find at times a wandering of the mind amounting sometimes to delirium. The countenance is much altered; the features are all drawn up, and expressive of great anxiety and suffering. A path of crimson is observed on the cheeks sometimes, and is an unfavorable symptom. If we are to expect recovery, the pulse will be found less frequent, and the skin cooler, and softer, the tongue cleaner, the thirst less ardent, the bowels easily acted upon, and the patient gets refreshing sleep.

and turns from her back to her side. This change of posture is one of the best symptoms we can remark, but by an inattentive observer may easily be overlook-ed, it might be considered a matter of little consequence ~~whether~~ whether his patient lay on her back or side, but it is quite proper that our minds should be directed to this circumstance, because it is often, one of the first indications of amendment.

Causes. The causes of this disease are numerous, and I shall give you some of the most important. founded upon the experience of those of the profession, who have care-fully noted them, wet and cold weather, is particularly favorable for its propagation, Local causes generating malaria also, have great influence, in producing it; Mr gason & Rigby agree in considering the unhealthy condition,

of the westminster Lying in hospital, dur-
-ing some years to this cause, It may be
contagious. Indeed this has received the
sanction of the profession, it would
be useless for me to quote examples, in
confirmation, and I think superfluous.
A depressed and anxious mind, intem-
perate habits or deficiency of food,
and perhaps previous disease existing
in the system are styled, as exciting
causes. During the periods, of the
epidemic, prevalence, of this disease
we find that the delicate, the for-
-saken, the unmarried and the unhap-
py, were most liable to be attacked
as well as the most liable to be
destroyed, Gooch (P 60) says, "it is and old
remark of those who have had much
experience in lying-in hospitals, that
the single women, are peculiarly liable
to fatal disease, after delivery.

Morbid Appearances. The peritoneum exhibits signs of inflammation, especially that portion covering the uterus, it is thickened, and sometimes softened. more or less serum are found effused into the sac it may be clear or turbid of a yellowish white colour, with shreds of lymph floating in it. Effusion of the puriform matter, or a reddish serum, is sometimes observed beneath the serous membrane, this puriform matter, has been found in different parts, showing that the inflammation, has been more intense, in some parts, than in others. We should be very cautious, after making a post mortem. of our person, for frequently we cut a finger and it is followed by dangerous symptoms, more so than if under other circumstances, and this should induce us to use much caution,

Pane Lymph

Diagnosis. Under this head it will require carefull notice of the most diagnostic symptoms of those diseases which might be considered belonging, to the disease in question.

Peritonitis may be distinguished from Hysteritis, by the character and situation of the tenderness, in the former, the slightest touch on the abdominal parietes, causes excruciating pain. In the latter the patient can bear pressure very well, until you feel the enlarged uterus, now, if you increase the pressure, acute pain is produced, and the tenderness is not so generally diffused over the abdomen, From after-pains or hysteralgia. These affections occur soon after delivery, and diminish by the third day. about the period, peritonitis commences.

After pains are accompanied by perceptible contraction of the uterus, which is absent in peritonitis, The hypogastric tenderness, in after pains is not so great, except during a pain and it goes on decreasing; whilst in puerperal peritonitis it rapidly increases. From intestinal irritation. — this affection may be distinguished by being accompanied with marked evidences of gastric, and intestinal disorder, the tongue is loaded, and abdominal pain does not radiate, from the uterus, but is diffused, neither is the uterus enlarged or tender as in peritonitis. An other disease often preceding labor, called ephemeral fever, requires some diagnostic symptom, to signalize it from peritonitis, the commencement of

ephemeral fever, may excite some alarm, from its resemblance, but its duration is shorter, its decline more rapid, with less constitutional symptoms, and less severe. The breasts continue distended. There is also less abdominal irritation, than in puerperal peritonitis,

Prognosis. - The general prognosis is unfavorable even in sporadic cases but more so in epidemics. If we take the statistics of the epidemic that occurred in Edinburgh in 1773, we find none recovered, and in reading different essays, we see the mortality has been great, we may say of a truth that to save 1 out of 3 may be considered good practice, in an epidemic season. With all the great resources, our noble art affords. Dr Holms declares it to be as bad as the plague

Treatment.— In entering upon the treatment, of so dangerous a disease as this I do it with a great reluctance. but setting aside the different theories, in regard to the character of the epidemic, I shall describe the ~~the~~ treatment which has been found most efficacious. As this disease is highly inflammatory, our attention is directed to the pulse, if this be firm, a large quantity of blood should be taken from the arm. and if necessary, should be repeated. In regard to the manner of bleeding it may not be amiss to speak of here, as some have condemned this practice, and upon neglect; more than experience, in not allowing the blood to flow in a free stream, but let it trickle down upon the arm and to no benefit, and upon this

ground, have advanced their theory. If upon the other hand had they placed, their patient in the erect position, and made a free orifice, so that the blood might flow in a full stream, and in a short time. Their patients might have run a better chance of recovery.

After full depletion, the next most powerful remedy is mercury given in large doses, in order to clear the bowels of there feculent matter, followed, by some drastic cathartic, a dose of Infusion of Senna and jalap may be given until stools are procured. But upon this point we have a great discrepancy of opinion, some argue that cathartics, do more harm than good, by causing the surface of the intestines to rub against each other,

with such violence, as to add more
to the patients sufferings, and danger
than benefit; Others argue different,
they hold, that it does good by
unloading the intestines of fecalent
matter, also establishing a copious
drain from the inflamed vessels,
acting also as a counter irritant.
But I think it should not be carried
to such a degree as to produce tor-
mina. After the bowels have
been cleared of their contents, and
~~and~~ the pulse indicate a repetition,
of venesection, you should not hes-
itate in bleeding, but if we have
any circumstance forbidding.
(V.S), a number of leeches may be
applied to the abdomen, Dr Thomas
recommends, when the leeches fall
off, the abdomen should be fome
-nted or covered with a light bran

poultice, and it has a very soothing effect. After full depletion, Dr Thomas recommends, mercury alone, or in combination with opium, in doses of x gr. or in smaller ones, often repeated saying every hour, and to be continued until an impression is made upon the disease, or until the gums are affected, after a decided impression is produced, the dose may be diminished, and the intervals lengthened. For preventing irritation of the bowels, it may be combined with dover's powder or opium. The opium does not, merely prevent irritation, but exerts a powerfull impression upon the disease. Mercurial friction is a valuable mode of affecting the system.

When the calomel acts on the bowels it may be omitted; and, opium alone continued; Dr Thomas of the Maryland university, says he has seen as much benefit, from it alone, as from calomel; and, I fully concur with his valuable opinion, given in (ign) doses every hour; and with the greatest benefit, by allaying pain, and giving the patient sleep, which to the patient is a period of pleasure, and wished for; Dr Stokes was the first to point out the value of opium in this disease, where bleeding was inadmissible: to which we have many valuable testimonies, confirming his experience. Emetics, were formerly recommended but experience has proved, them to be injurious, as they, cause too

much irritation of the stomach. If the disease is ushered in with vomiting they may be of benefit, to throw of the bile, and glairy fluid, that has been poured into the stomach. Small doses of ipecac are useful as a diaphoretic, in conjunction with the effervescing draught when the skin is hot and dry and also useful as a refrigerant, with the addition of Spts Nitre.

Oil turpentine has been highly recommended by Dr Brennan, he considers it a specific in this disease. He gave it in doses, of a tablespoonful at a time, in a little water sweetened. Dr Chew thinks it is of very little benefit; and he also thinks they were mistaken in their diagnosis, he says the cases must have been lymphanitis.

It certainly is beneficial when the intestines are tympanitic, given in the form of an enema. Used as a counter irritant it has been found useful, and a very good, and speedy, way of causing it to act, soon, is, to make a mush poultice, on which you pour the oil, apply this to the abdomen, and soon it will cause a burning sensation causing the skin to be covered with small, pimples, I applied this to a patient and found it prove useful. To make it more salutary combine it with hops. And it has been recommended by other physicians, my experience has not been very extensive in regard to this plan of treatment, but would freely recommend it

Sometimes in the course of this disease the stomach is very irritable, so much so that any thing taken into it, is soon thrown up, to allay this, the effervescing draught, containing a few drops of laudanum, or common mint, with laudanum, will prove highly useful. If this should not allay the vomiting apply a mustard plaster over the stomach.

Tobacco in the form of an infusion applied along the spine as recommended by Dr Chri (See on Therp. M.2, 11, v) may prove a useful agent, its modus operandi I shall not endeavor to explain, as sometimes medicines, act beneficialy contrary to our opinion, and their general therapeutic effects

since inflation of the peritoneum is a disease, so violent in its character, and rapid in its progress, and its features so suddenly changed, from a state of excitement, to that of debility, it is necessary that the doctor, should be very often, by the bedside of his patient, in order to counteract such changes, as he will see in this disease.
Indeed the physician, must almost become, the nurse if he expects to cure his patient, for in the second stage, or ~~stage~~ depression, the continuance of such treatment, as was used in the first stage, would invariably tend to hasten the fatal termination, this should be attempted by sustaining the system, by a generous

supply of easily assimilated nourishment, and by the use of stimulants and cordials. Brandy, therefore, in any proper vehicle, may be used or wine, ether, ammonia, opium, aromatics, and bath are those which affords us the best chance of success, although it may be small, yet we should use our utmost skill until the last, for some have been brought almost from the grave to perfect health, If there be present certain indications, of effusion in the abdomen, I fear art can render little service. Nevertheless, some cases are on record in which it is believe that the fluid was evacuated externally by an abscess; and the patient survived, if this be true we should not despair

Before closing this thesis, I will say what I have said before, that this disease is contagious, and my object is to speak, of the propriety of changeing your dress, after visiting a patient, labouring under this disease, before you visit another patient, and for the safety of those who may be so unfortunate, as to bring forth, at this period. When the physician has two or more cases in succession. He should refuse to attend lying in women, as he will be a source of great mortality, by carrying into their chamber, the dormant seeds of puerperal peritonitis,

An Inaugural Dissertation On The Duties of a Physician

Submitted to the examination of the

Provost, Regents and Faculty of the

UNIVERSITY OF MARYLAND

for the

Degree of Doctor of Medicine

By

Anthony L. Manning

of

East New Market

Dorchester County — Md.

February 1852.

As I have been permitted by divine supremacy to make choice of one of the noblest professions of earth; yes, the profession of that selfsame providence, I feel that I am entering upon a duty most solemn, and taking upon myself a responsibility of paramount importance.

To understand properly the machinism of that being made in the exact image of the living God, and placed as he is for good at the head of medical science becomes the duty of every practicing physician; to know the changes that the ravaging hand of disease is capable of making in that complicated machinery man, to be able when called-upon to administer promptly and properly, the most valuable means placed in our hands by an all wise creator for the cure or relief of God's noblest work man, and his

most charming companion woman equally becomes the duty of every member of the profession: to be able to do which becomes his duty to study carefully, observe minutely, watch steadily, and above all to administer cautiously; he need only banish from him such reserve as becomes strictly necessary, he should not be harsh, rough, uncivil, unkind, or unfeeling but it is his duty to be mild, calm, quiet, tender, obliging, thoughtful, consoling, yet positive and energetic cautious in his decisions, delicate in his examinations mild in his approaches, and guarded against drawing hasty conclusions, giving groundless opinions, and positive assurances; for upon his opinion or his decision perhaps depend the happiness, the prosperity, the security, yes, even the standing and character of many in society; by his decision he may dampen the happiness of families, he may

throw a [redacted] halo of gloom forever over their once bright and brilliant horizons, and he may consign to an untimely and ignoble grave, beauty, worth, honour, and virtue; he may mar the happiness of the cheerful fire-side, crush the prosperity of youth, and blight forever the only hope of old-age; he may draw down their gray hairs, with sorrow to the grave, and over their departed remains make humanity weep.

Many are the scalding tears that have already bathed the cheek and bedewed the heart-broken pillow, and it now becomes the duty of every truly enlightened and philosophical physician, to help dry the tear, to help soothe the sorrow, to help calm the agitated mind, to help quiet the heaving bosom, to help administer to the numerous wants of frail mortality, and endeavor to block up those roads that lead to degradation, to destruction and decline. A horrible case of quackery

occuring in my immediate neighbourhood and fre
upon my memory, I will relate: A lady, the wife
of an honest and respectable farmer Mr Rauleigh
under the superintendence or sent by direction of
Doctor Alexander H Bayly graduate of this school
and and honourable and highly respectable practit
of medicine in my native County Dorchester, to
careful examination of Professor N R Smith of thi
institution, who pronounced from his correct an
penetrating diagnosis her disease to be an adheren
mammary cancer involving the axillary glands, an
that her miserable existence could be but a shor
time prolonged: This diagnosis need I say was neve
pronounced to be false by one of those self-conceite
extraordinary and convenient beings, profesing
cure all such diseases as scientific and practica
men have failed to cure; this all-learned, all-wi

numb-skull of an empiric calling himself Doctor, pronounced a cure inevitable in a few weeks, the dying woman caught at the straw, and a mere straw he was, his seas of disgusting medicine floated down her almost without a murmur, and his galling plasters loaded her with pain excruciating to her grave, a house filled with small helpless children, and a poor bereaved husband are left to mourn her sufferings and her loss, Like Sappho from the frowning promontory of Leucadia she leaped, and is no more: Other cases more heart-rending and startling I could perhaps adduce, but record bears its truthful though shocking history too; why wonder then that the very bones mouldering in their coffins should start with terror at the sound of torturing quackery, or why be astonished if one shout from a false and flattering quack should cause the whole family of the dead to leap from death, to life,

to light, to health, and happiness.
It should become the duty of every physician when entering upon his noble duty as a practitioner of medicine, to resolve henceforth and forever to denounce quackery in its every form, to recognize not the deceitful and licentious claims of such as have but too often brought reproach upon the scienc and retarded its glorious progress; of hundreds and thousands that have but cunningly crept in and lurked beneath the quiet shade of the noble edifice of medical science, and beneath it, barbarously slai their millions, and stamped upon its glorious name the murder of earth's brightest jewels, should arous in the breast of every genuine physician their tender sympathy for suffering humanity, and arm, and nerv him to his imperious duty; he should throw off all reserve and march boldly forward in the defence of, an

for the honour of his institution, and demand of intelligence why wisdom has fallen: he should endeavor to arouse the suffering multitudes to a sense of their imminent danger and point out to them the road that is leading them to inevitable destruction; let but solemn reality point back to those ancient and modern places of deposit and number all the dead that have been there consigned by ignorant physicians, if I may say so, and by quacks, and ten thousand voices will simultaneously burst in unison with my own, and much more effectually point out the almost boundless duty of a physician.

In my opinion, humble as it is, every physician should endeavor to help rear upon that solid and ample foundation lain by our Hippocrates and Hunter, the proud superstructure of their giant works, and lift high to the breeze the banner of medical skill and medical worth;

And heaven may yet conduct us to greater prosperity and success, and permit the jewels of the present day to sparkle from its heights, and from its summit their floating banners wave.

It is the duty of a physician to apply himself attentively, and make the science of medicine his sole and almost only study; his diploma is far from being the only requisite, it will not do to say, go diploma practice for me; he can-not expect to become eminent, or to do justice to his profession by reveling in the arms of vice and degrading pleasures, or by breathing the contageous air of seductive indolence, neither is it his duty to be tottering whether from the kindness of friends or what is worse, from his own depraved appetite with intoxication over a suffering, and perhaps much worse, an agonized and dying patient: Physic

touch not the giddy bowl, lower not the dignity of your profession by warming thy pure blood with its angry fluid, nor taint nor cloud thy brain with its sad effects; But he should be able to walk steadily, firmly, manly, cautiously, and, at least looking as intelligently as possible into the sick-room of his patient; for it is upon their confidence that much of the physician's success depends, he should inquire and examine cautiously before attempting to act promptly; he may thus impede the rapid strides of disease, and avert the patients threatened doom, he may thus reap to himself the laurels of a physician and add to the just dues of medical science, when by acting hastily, injudiciously, and incautiously, he may suddenly determine the fate of his patient, and plunge him woefully unprepared into the chilliness of the grave; When called upon it is his duty to hasten to the bedside of the suffering poor, to lend a listening ear to

their feeble cries, and cautiously administer to their suffering wants, it is the duty of a physician to let the tenderness of human conscience dictate to him his course, and not alone the sparkling diamond or the glittering gold; whether called upon to visit the princely palace, the gorgeously decorated mansion or the poorest hovel in the obscurer walks of poverty his wisdom and skill should be alike tasked, and his kindness and sympathy alike distributed:

Noble life to him who by hard and continued study, by close application and scrutinizing observation, by deep researches and penetrating comparisons have cast from off his eyes the heavy scales of ignorance; or he who shall ignite another volcano to blaze from the immense heap of medical knowledge. Kind providence in his generous distribution may perhaps by the efforts of his subjects rear us another

Hunter to help enrich our science, and as from Cos Hyppocrates sprung, so may our Hunter spring and his branches widely spread from this old MARYLAND UNIVERSITY, and though we may not reach it, it is our duty to aim at perfection, for within the thin shell of the acorn is enclosed the commencement of the towering Oak, the small commencement of the American Colonies have waxed into a nation, from the feeble beginning of Demosthenes grew an orator whose magnificent eloquence the world attracted; such may be the growth of students of medicine, though I must candidly confess my aspirations soar not quite so high. True, the ax may fall the Oak, a pestilence or a famine may destroy a nation, death may silence the tongue of the orator, and time and misfortune may dim the imagination, lessen the effort, or paralyze the energy of the medical man. It is natural to

suppose that in Medicine as in all other sciences, the progress must be gradual, but we should endeavour to carve for our-selves deep channels through which the life current of our science is yet perhaps to flow: The healing art is but yet in its infancy, let then every medical man in the discharge of his duty strive for the foremost rank, and I doubt not some one or more students of this UNIVERSITY will be brilliant stars in the galaxy, will stand among the preeminent; it is our duty then as medical men to make the attempt; it is our duty to help promote the science.

Whose duty is it to guard reputation? the physician; whose duty is it to protect slandered innocence? the physician; who are called upon, and whose duty is it to decide important questions, to sustain the character untarnished, or though painful as it may be to decide

upon and communicate to unfortunate friends lost reputation? the physician; to protect virtue against ignorant, heartless, and envious slanderers, without which beauty has no charm, honour no distinction, merit no worth? the physician: false accusations and calumny are ever ready to be heaped upon innocence, and charge and lead virtue to be suspected; base calumny has no victim but innocence and virtue, into which it buries most deeply its venomed sting; can there be a crime more grievous, or an injury more atrocious than to steal away the virtue of the innocent? can there be a loss more irreparable, or can there be a nobler duty devolving upon a physician, than to guard himself against such calamitous mistakes, and by well tested skill, and to the honor and praise of medical science, clip the vile tongues of those spoilers, who are daily robbing society of its sweetest charms, and

bringing many hopeless and helpless sufferers to their graves for refuge, and upon their tombs obliterate their priceless innocence and virtue, with the malad scroll of shame of infamy and of disgrace.
Oh that I had talent of more than galvanic power that could effect you by giving not only life but soul to my subject that seems incapable of it; I would then pass with delight to dwell upon the living master physicians of our own land; but I feel that I ha already unnecessarily caused your own rich imagina more than once in following me through the course of my harassing subject to descend from the height where education, refinement, talent and genius hav placed them, and that I have trespassed too long upon your patience and your time; but I must say, bold is the stream that has burst forth from ou Hyppocrates and Celsus, from our Pare and Hawy, f

our Benjamin Rush, and our Percival Pott, from our John Hunter, and our Hallar, and come rolling like a mighty torrent over the world washing innumerable tains from the giant pillars of our unyielding edifice that ignorance and superstition have bound to them for centuries; and need I mention others who have hung up their own bright and imperishable names on the shrine of memory with them: we should examine its increasing depths and compare its magnificent powers, we should like our immortal ancestors cling with their almost imperishable hondness in one united phalanx around our venerable standard of medicine and try to free the science from the absurdities with which rude ignorance and superstition, envy and prejudice have invested it, and we should — but as my ideas of duty advance the scene opens wider to the view and

wider does the mind expand, until it is lost in the immensity of my subject, which like the great pool of Norway, seems to draw into its vortex not only the mighty things of earth but its atoms too: But do all that observation, application, attention, experience and time can do, and hearken to the manly voice of an unseared conscience, which I hope we all possess, and the duty of a physician is done.
Human-nature is forever spurning the present, and anchoring its hopes on the future, so have I anchored my hopes on the contingency of an hour, and if I unfortunately fall below my heated imagination of the duties of a physician, I hope the tender sympathy of every professor here will sometimes wander among the ruins of a heart or dwell for a moment in the place which the fire of insurportable rejection has desolated. To the student of medicine the giving

nd receiving of a diploma is the very hot-bed of his
eart, forcing at once all its tender feelings into a
ulness of fruit, and cementing forever his friendship
the professors; Pyramids may moulder away, but
he breeze of heaven which fanned the medical Pyramid
n its splendor shall sigh around it in its decay, and
feel truly thankful that the time has arrived when
can present my heart-felt thanks to this distinguished
oard, and like the breeze around the rock built
Pyramid, sigh to leave them.

Now with the motto of its feeble author I respectfully
submit my thesis: He who knows not what to do,
do that which can not hurt.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Intermittent Fever

This is a distinct remittent disease, characterized by certain symptoms occurring at stated times, not by the mere of fever during the progress of the period which intervened from the first appearance to the commencement of the hepatic called the intermission; and the whole period, which is occupied by a paroxysm and the succeeding intermission is termed the interval. This disease has three regular and well marked types and they are generally named the Quotidian, Tertian and Quartan. There are also intermittent, by Author various other types, such as Quintana, Octan, Nonan, and Decan, the last named occurring at intervals of 10 days. But all of the last named types are very rare. In the Quotidian type the paroxysm recurs daily with an interval of

Then is [illegible], in the [illegible]
[illegible] that [illegible] in [illegible] [illegible] [illegible]
[illegible]; and in the Northern Hemisphere [illegible] will
[illegible] [illegible] [illegible] [illegible] [illegible]
The regular lapse which [illegible] [illegible] [illegible], in
[illegible], to a variety of modifications. The [illegible]
[illegible] in the Solstitial [illegible] occurring every
day, their [illegible] [illegible] [illegible] corresponding to each
other in the [illegible] of day, they recur. There is also a
double Solstice but a daily [illegible] in [illegible] of which
may be in the [illegible], and that of the [illegible] in
the Morning, [illegible] different [illegible] of the day
differing in character. The [illegible], we have on
Monday and Wednesday, the [illegible] taking
place in the Morning; and corresponding with each
other in character, but on Tuesday and Thursday this
may occur in the Afternoon, and in the same manner
corresponding with each other, but differ from those of
the former two days, with [illegible] days, it is very
common indeed, to see a double Solstice, occurring on
[illegible] [illegible] [illegible]. [illegible] also that the

paroxysmal in the length of its regular. This is
is usually remittent, often. There is little to remove
to death but, chiefly, in children. In the adult further
complications take place, such as the paralysis,
and the other one. In the latter it may be hard
paroxysm recurring every day, but the less severe
paroxysms differ, however, from the last, accordant with,
in these cases, the other, and, especially the
death, before the paralytic stroke. These mentioned
diseases are rare. Cases which occur in which the paroxysms
are altogether irregular. These are distinguished by the
name of Erratic, intermittents. The paroxysm of
an intermittent is regular. Besides of these distinct
stages - a cold, a fever, and a sweating stage.
The paroxysm is sometimes preceded, by a feeling
of hunger or fatigue and general uneasiness
accompanied, by stretching and yawning. There is
often an uneasy sensation in the joints and limbs
with some slight pain in the head, and, back
sometimes pain and accordingly a very
uncomfortable feeling. Generally the,

Epileptic convulsions or fits, in which, being distinguished, which is usually spoken of as conscious cases, brought on by an old and other illness. Dizziness with the patient is slight headache, also giving rise to something like them, which may be held back off for the space of a few hours, but merely are wiped out with the occurrence, the next day, or the day after, of the same kind of operation has been increased during, when the patient is reminded of his former attacks, or probably may be informed, he has a physician that he is labouring under an attack of intermittent fever. If the attack is said to be in high or dangerous, the patient may be treated in the following manner. The Cold Stage = When the stage is about commencing the patient feels very weak. He begins to shiver and yawn and, very soon he sets complains of being chilly, he has pain in his back and, often distressing, the chilliness gradually increases, the patient begins to shiver and, thinks „ his teeth chatter and, it is said with

been either at the time of the fracture, or at the period when the bones were united, the appearance which has received the name of Pott's Aneurism. There is a continual throbbing and shuddering over the whole skin. The veins at this time, were red, hardy and full, the countenance disturbed, the mouth, dry, the tongue pale and moist. There is often thirst, diminished flowing, and vomiting. But this I do not think is by any means a constant symptom. I have had some eight or ten deaths of the disease, and have never perceived, but in one, and the patient was very, very slight in the chest. The tongue I believe is always moist, although so diminished that the slightest remark has made in the latter a terrible fever. The breathing of the patient is often irregular and hurried, his pulse is generally depressed very much. During the cold stage, in some rare cases we have rigors or coma, and even depletions of a high stage. The duration of the cold stage is variable, it sometimes may last

bed for a few minutes, and again in half
bed for two, three or four more. The average
duration is a little more than an hour. The
first stage declines there commences what is
called the "hot stage" = the passage from the
cold, to the hot stage is generally in its beginning
welcomed, by the patient. But when it becomes fully
formed, it is quite alarming to the patient as
the cold stage. There is for a few minutes an
intermission of death to the patient, but if he
attempts to move his limbs to a cold part of the
bed, there is felt a sudden abundance of chillings.
Gradually the white surface, becomes hot, all traces
of the cold stage have disappeared, and the
patient is affected, with a burning heat. The
cheeks become flushed, the eyes reddened
and, edgeated. There is great thirst and a
more or less delirium in this stage of the disease;
and, there are sometimes, moments of
coma of it. During the different stages of

have not, in my own case, been the
of the most troublesome symptoms appeared
to be extremely unpleasant. The crack of the
tongue and throat. The respiration is more
than in the preceding stage, it is
laborious, oppressed, and hurried, there is
also in this stage more or less considerable
pain in the back, and, apparently deep seated pain
in the heart, so much so that the patient sometimes
complains of it in expectorating phlegm. There is also
delirium. This symptom Dr. Mackenzie says had been
known to be almost constant throughout the children.
Convulsions are also said, to be not uncommon.
The temperature of the skin is considerable.
Dr. Joyce found it to be 105° by the thermometer.
And Mackintosh states that he has known it to
be as high as 110° in Great Britain, and, 112° in
Warm climates. After the convulsions are diminished,
the skin being dry to the touch, the voice, cough,
& swelling of the tongue, the mortality of the first
stage is rather greater than the second. It generally

cases about an hour and a half or two hours.

The [illegible] [illegible] [illegible] gradually
terminates in the third or sweating stage. When the
perspiration begins to appear there is an abatement
of all the febrile symptoms. It first makes its
appearance about the head and breast, but then gradually
extends over the whole surface of the body. It is said to
be slight sometimes, but it is generally copious, and
occasionally very profuse. As the perspiratory symp=
toms increase, and the febrile symptoms abate, the
skin becomes gradually cool, the mouth moist, the
headache gradually disappears, the secreting vessels
become relaxed, and the urine copious. After the
sweating has continued for an indefinite time,
the pulse gradually grows slower, and the sweating
and other symptoms diminish. Very frequently
the patient falls into a calm sleep, from which
he awakes free from fever. The average duration
of the whole paroxysm varies considerably. I think
however that the average may be set down at from
three to eighteen hours. It occasionally does [illegible] to

The time for the operation arrived. This disease is also liable to many difficulties, so that we may sometimes see the old stage, an entire sloughing, no bone, & its characteristic appearance, but a little blunted, & not the sharp, well defined edge, & one bone exposed of the body, some bone dead, & this state of the disease is sometimes known under the name of the secret spine, & difficult to distinguish it from the Caries from a strong spine.

Sometimes there are no symptoms of fever, the old stage sloughing off into the dressing, but it is frequently the case that this bad, or sloughing stage, is wanting, the fever subsiding without any perceptible, or its place be supplied by a diarrhoea, or an increase in the quantity of urine. Dr Taylor's case of this disease had many of these features. There is still another variety to be mentioned viz. Macculloch says that a sinus may exist one third stage, which leaves behind the charred stage in order, the remainder of the vertebra being unaffected. There is also mentioned in the Edinburgh a medical

Varieties of this disease commence in the
eliminated, and characterized by a very little pus,
copious perspiration in the third stage, by the
pain, although remarkably from varied
state of the body, attributed Phrenitis and other
to acute of Mania. The days the pain was
with great violence, death always taking
place in the third stage. During the inter-
mission between the paroxysms the patient is not
always free from disease, so it perceptible, disease
is lowered, he also has some degree of a burning pain
in his back. The skin has perhaps a yellowish tint on his
head, he has a pale yellow complexion, and a clotted
tongue. Pots and Paints that these two last symptoms
are commonly observed taught in Phrenitis cases.
I have been informed labouring under this disease
who looked, as well during the intermission as if
they never had had the disease. The appetite is
sometimes improved after the digestive organs
damaged. Pains always fortunate; although it have a good
appetite during the intermission, and pain

[illegible]

[illegible]

[illegible]

Recurring the last week, for, either continue, return, or stop, then for, a period of eight days at the longest, they return in the, course of the twelve the, Cycle will, still, and, yet, a relapse will, which after the paroxysms are commenced to recur towards night, will often make the attack most in the, morning of the, regular day. Change, sometimes in the, different hours. The most common is this, to be from a Quotidian to a Tertian, and from a Tertian to a Quartan. Sometimes they will, change, but once, and again they will, continue, changing. In fact this there is no regular rule. These cases are called, (Irregular) intermittents.

If left alone, Intermittents will, sometimes terminate, spontaneously, and early in the, course of the, disease, Tertians, and, Quotidians usually terminate in about two, weeks, Tertians in four months, and Quartans in, sixty days, or eight weeks, although, if they are not interfered, with, during their progress, they are apt to be prolonged, to, much longer period,

Intermittents have also a great tendency to return,

Afterwards he saw three cases, in which he never saw the patient, but only heard the history of the disease. He thinks that the type is more mild, to come than another, but why it is so cannot imagine, he thinks that the causes which will produce the type of the disease will produce another. Dr. Fagery also has seen the disease, a recurrence of the disease after its leave off for fifteen years. He also says that to the Author it is seen after many years at the period and hour in which it would have happened if it had continued with its original type. It is generally the opinion that subsequent attacks of this disease, without a fresh exposure, in the cause are milder than the original one. Intermittent fever has also different grades and complications. In vigorous robust subjects, and generally in temperate latitudes it assumes a sthenic and inflammatory character; with a vigorous reaction and full, strong pulse. In those subjects weak and debilitated from any previous illness or whatever cause, it seems without a

of Chill, characterised by general inactivity of the functions of life. Intermittents are combined complicated with other diseases, of dysenteric, cholera, and, bilious, inflammations. Diarrhoea is frequently accompanied. Dropsy and Anasarca are by no means uncommon in this disease, the organs most frequently affected are the upper, stomach bowels, liver and brain, & its membranes. Intermittents are also sometimes followed by Rheumatism, it has been thus, occasionally to alternate with Rheumatism, & that the Rheumatism which ceases, and the ague returns, and vice versa, Dr. Gregory mentions a case, in which he saw this disease alternate with Cancer in, and also with Hematuria. Chronic, and, cerebral, intermittents are spoken of by Dr. Good, but there is no foundation for such distinction. Of the effects of intermittent fever one of the most common is enlargement of the spleen, indeed enlargement of the Viscera is often noticed during the chill, it is sometimes called ague cake. Dr. Chisholm mentions

having been a case where the effects resulted either immediately, the tongue, another where it resulted, before, sounds, enlargement of the liver and jaundice, are not uncommon. Neither the frequency nor the severe is the force, nor any, nor the duration, or nature, is not an uncommon occurrence. I remember having seen a case of this kind, in the Wallinde, infirmary in a man, who had, been working in an ore, hunt, it had been produced, I believe, by a lengthened intermittent fever, very frequently there will be anorexia, or bile, or a dentition. Dr. Macculloch mentions Quinine, as the effects of intermittent fever. Analysis he mentions as being another of the effects. It is also thought to be found, menstruation, and the secretions of milk in women, and habitual discharges in men. But while they do harm, on the hand, they are thought to do good, on the other. These secretions have the credit of overcoming other diseases, that is they substitute a safe, and temporary remedy, for

[illegible] and chronic affection, the diseases which are most in this way belong more to the nervous and high, as well as the lymphatic, are, named Cerebro-Cutaneous. Dermalgia, Cephalalgia, Rheumatism, and, cutaneous affections. The surgeon has, to say what he had, been, fortunate enough, to cure, by it. In fact ague, has been, through, some, mistake, delighted, a, thing, that, they, have, contended, it, never, should, be, cured; but, if, Rowe, Mitchell, and, Wilson, on this, subject, he, says, that an old, proverb, once, prevailed, which says.

Thus, An Ague in spring,
Is fine for a King;

but not for a subject.

The anatomical,

Phenomena, found, in, persons, who have, died, while, labouring, under, this, disease, are a, congested, state, of the, liver, with, blood, of a, dark, purple, or black, colour; the inflammation, of the brain, and, its membranes, cerebral congestion, pulmonary inflammation, and, congestion, the, spleen, has

few general examples, and above in regular
sometimes without retention of a catheter
Repository, that, in children under 2 years
where the other above mentioned. The bowel
complaint, seems to be increasingly frequent in
and seems portentous. It also appears
that the bed wetting are sometimes relieved.
On feeling the fingers over any of the areas of the
urethra they are felt to be long, tense & thick this is
of rare occurrence.

As to causes of this disease
authors have been trying hard for years and
years. Hammond has shown that the intermittent
fevers & other causes are caused by smooth
Miasmata, or malaria. We do not believe that
there are hydrogen, with no a case of this disease
has not produced by malaria, but with
standing these, are cases determined by straining,
which cannot be traced to miasmata. There are
sometimes cases caused by the introduction of
sounds or catheters into the urethra, indigestible,

fed into the stomach so little some in
the very mind into death had not so much
power, before this, the sinews and bone equally,
to the influence of Belladonna, and, that the intro-
duction into the location of these instruments, and
the, undigested food into the stomach, were nothing
more than exciting causes, the food, relative to each
of it, attached to other that which had something
to do with it. There is no doubt that that it had,
as I believe intermittent fever is like many other
things in this respect, any person who has experience,
therefore to its causes is likely to have the disease,
and the disease once contracted, is readily excited
into action. He rose - attached for three successive
nights accustomed himself to bathe, at midnight
in the river Rhone, towards the close of winter when
the water was cold, and, upon retiring to bed,
after each bath, and, recovering himself thoroughly
he was affected, with considerable, reaction, which
terminated, in perspiration. At the end of the
seventh day he omitted the practice, but was

Nevertheless affected, nightly and about the same hour with a regular intermittent paroxysm consisting of the three regular stages, which returned for about a week, when it ceased spontaneously upon the occurrence of an event which took him out of his bed at the hour for his paroxysm to return, and induced him to take a side saddle back, which excited, and warmed him. I do not think that because a paroxysm is in the habit of returning for a week or so at a certain time that it should always continue. They in no manner, he should be continually annoyed by this most harassing disease. It is the opinion of Dr Watson that if a person were never exposed to the Malaria, he would never have the disease, but having had the disease once, he may have it again, though he may never again be exposed to the specific cause. Dr. Dr. Rogers relates the case of his brother in law, who was attacked by this disease when ever the east winds blew, the circumstances which appeared to be essential to the production

of Miasmata, are heat, moisture and vegetable decomposition, the morbid effects ascribed are seldom perceived under a temperature lower than 60° although vegetable decomposition may be going on. Neither is the necessary for the development of miasmata, although too much of it appears to have been a tradition. Their morbid effects are felt during heavy rains, than after the rains have ceased, and the water has run off from the surface of the country, or has partially evaporated. It has also been observed, that in very wet seasons the low marshy lands, which were before much unhealthy, are least affected, while the higher grounds, which have commonly been healthy, now become deadly. Vegetable decomposition has also its influence. In no situations is this so powerful as in the deltas and along the banks of large tropical streams, which, during their period of flood, bring down the washings of the soil, loaded with vegetable

remains, and, when subsiding, have been exposed to the hot sun. The draining of ponds and marshes is also followed in time. The digging of canals has also been known to produce malarious fevers, which lasted, according to the turning up of the soil, until vegetable remains. The long continuance of dry weather, followed by warm rains, has been supposed to favor the cause of malaria. Salt marshes are thought to be less unwholesome than fresh, and some suppose that the mixing of salt and fresh water is peculiarly productive of the poison. Exposure to the heat of the sun, a cold bath, excessive fatigue, mental excitement, and emotions even, are deemed of purgative medicine. Persons, moving from a miasmatic district to a healthy district, are sometimes attacked in consequence of the influences to which they have been exposed. Persons are also more apt to have the disease while fasting, whether this is owing to a lightish, in what manner miasmata act in producing disease is not

Hudson, the susceptibility is said to be in the circulation, being altered, and with the chief avenues through which it enters is the air cells of the lungs. The time at which the disease is most apt to occur, is in the latter part of summer, and in autumn before frost makes its appearance there is no specific time at which the disease may make its attack after exposure to its cause. It may attack you immediately almost upon the application of the cause, or it may lie dormant for weeks or months, and I believe it is supposed by some that a year or more may elapse before its attack, though all ages are liable to the disease, infants and old people are less susceptible of it than the middle aged, men are more liable than women to the disease, probably because they are less exposed to its influence. It has been thought to attack the fairer in the north, negroes are less susceptible than whites.

The prognosis in this disease is generally favorable, when there is a tendency to overcome

disease, and should be induced in the paroxysm. Inflammation of any vital organ may give rise to danger, but the chief danger is from the secondary affections which result from its neglect, such as chronic enlargement and induration of the liver, and spleen. And besides the more complete the fever is, the more readily will the disease yield. The improvement of the paroxysms two or three hours is a favorable sign. Cases which occur in spring yield more readily to treatment than those of Autumn. Of the different types the Quartan is the most difficult to cure, and the Tertian the easiest. The diagnosis is always easy.

The treatment of intermittent fever in its common forms, or rather the remedies which are in use for it, are so well known, that my facts here will be left to speak, since I have nothing new to propose. The sooner the disease is arrested in its progress the better, and I am happy to say that it is always

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] Another case under similar circumstances [illegible]

[illegible]

[illegible]

[illegible] the disease, [illegible]

[illegible]

[illegible]

[illegible] from the [illegible]

[illegible] the head should always be kept in an elevated position. [illegible] of the [illegible]

[illegible] is strongly recommended, but [illegible]

[illegible] to agree with the majority of Physicians

on this point. He thinks that a few strokes [illegible]

the last month I appeared in the
convalescent ward. He declared that the
children's disease was merely that which in
the East, Cape, he believes, prevailed in the
unpaid population and which the old Cape,
medical men in speaking of the Coroqueen, and
on asking the Kaffirs, the Gunnamatjies gave
to Kaffraria, is epidemic, varying according to
the experience from an abscess and a little bright
pus under the lining and just, the bones
were denuded of flesh, sometimes behind
ears, the glands in the neck and groin, bluish,
the teeth, bones, hair, and strength, and a slight
pustular, horrid at each the appearance of the sores,
In the children we used the mercurial ointment
and the Cape medicines, applied to
the Coroqueen, the same cases will be according
to the old, then we, I think, it has been made

[illegible] [illegible]

[illegible] we give an [illegible], [illegible]

[illegible] [illegible], [illegible]

[illegible] [illegible] [illegible]

be given with [illegible] in this stage [illegible] disease

[illegible] the [illegible] stage nothing more is required

than to take care that the patient is not exposed.

[illegible], or as to check the discharge, [illegible] is the

period for the most effectual treatment; it is

during the intermission, that we attack the disease.

[illegible] [illegible] [illegible] of this [illegible] the

great remedy is the sulphate of Quinine, [illegible]

to be [illegible] as [illegible], as effectual,

the first thing to be done is to thoroughly evacuate

the bowels; then give the sulphate of Quinine freely.

Sometimes [illegible] with [illegible] to give an emetic;

but as it is disagreeable to the patient, that is

seldom resorted to. The most effectual, and

[illegible] the best cathartic, which we have in

this disease, is Calomel. It operates both

on the bowels and liver. It is a cathartic

[illegible] Quinine, in the form of [illegible] pill, and follow it in the morning with a dose of castor oil, or a cathartic of rhubarb & magnesia. During the intermission [illegible] to give the Quinine, for the attack, the paroxysm, and then administer the Quinine, the paroxysm may be given during the paroxysm, or rather the patient may be in a state of great intermission for the administration of our most valuable remedy, Quinine. However the intermission is complete, the remedy may be administered without hesitancy, but when there is much inflammation it ought to be preceded by the lancet, and other means to subdue the inflammation. When the inflammation is [illegible] typhoid, symptoms, or complicated with remittent fever it would be proper not to wait for a distinct intermission, but to give the Quinine as soon as the disease is clearly ascertained. The paroxysm is not only interrupted by this plan, but the inflammation assumes a more favorable character.

The quantity of Quinine administered, is governed by equally the susceptibility of the patient, but from three to twenty grains generally, according to intermittent, and continuously until the phenomena resulting the action of this medicine upon the system is manifested, such as ringing or buzzing noise in the ears, and some deafness. Sometimes very large quantities are required to produce this effect. When this produced, it is hardly necessary to push the medicine farther than to obtain this in a moderate degree, and if very severe, it has been recommended to stop the Quinine, until they have completely subsided, then the dose is recommenced, in the second or third paroxysm. The Quinine should be given in larger doses. As much as one hundred grains have been given in twenty four hours, but Quinine in such quantities is scarcely ever requisite. Permanent deafness has sometimes resulted from these enormous doses. In Intermittent

[illegible] in [illegible] [illegible], [illegible]
four grains of Quinine [illegible] [illegible] [illegible]
[illegible] [illegible] the [illegible], until the requisite
quantity is taken. The [illegible] is [illegible] to
[illegible] [illegible] of this division of the dose, [illegible]
[illegible] [illegible] [illegible]. The solution is [illegible]
for [illegible], but [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]. [illegible],
[illegible] [illegible] by an addition of an equivalent
of sulphuric acid, [illegible] the sulphate [illegible] the
[illegible], a few drops of laudanum may be [illegible]-
ally given. If you find, that you cannot administer
the Quinine by the stomach, you may use it in the
form of an enema. Sometimes it is applied
with the surface of the skin, previously deprived
of its cuticle by a blister. But it is not a very good
practice, as it will sometimes produce sloughing.
Dr. [illegible] of [illegible], who had much experience
in the treatment of this disease, used formerly
to be in the habit of prescribing from fifteen to
twenty grains in divided doses during the interval

of [illegible] [illegible] [illegible] he has given fifty grains [illegible] from [illegible] to eighty grains [illegible] [illegible] [illegible] [illegible] of the [illegible] Quinine has been found to be a [illegible] [illegible], but he recommends [illegible] be given [illegible] days [illegible] from [illegible] a [illegible] [illegible] grains [illegible], [illegible] [illegible] [illegible] pills. This [illegible] [illegible] expense may be [illegible] diminished, [illegible] [illegible] [illegible], and [illegible] [illegible] [illegible] advantage, results from combining Quinine with other medicines. [illegible], Capsicum, and [illegible] [illegible] has been [illegible] that [illegible] adds to the [illegible] [illegible] in the [illegible] [illegible]. The two others are added, [illegible] [illegible] [illegible] stimulants. They are frequently given to [illegible] of an intemperate Character, in Combination with Quinine. The bark is sometimes given in substance. From one to two ounces should be given during the day, in doses, of a drachm, or two drachms. The use of peruvian bark in the form of [illegible] [illegible] [illegible] and [illegible].

[illegible] given and [illegible]. [illegible] have [illegible] without [illegible] [illegible] might have been [illegible] to [illegible] the [illegible] [illegible]. Arsenic is [illegible] given in the form of Arsenite of Potassa or Fowler's solution. The dose is about eight or ten drops, three times a day for an adult, and for a child one or two years old, one or two drops, two times a day. The [illegible] of [illegible] [illegible] I have [illegible] also [illegible] [illegible] for the cure of this disease. Tincture of Iodine in doses of thirty drops given two hours during the [illegible]; but increased of [illegible] to eighty drops has been highly recommended. Spider web has also an equal share of reputation. Emetics have been supposed to do good in the commencement of the disease. Opium given one hour or so before the expected paroxysm, has sometimes done good. Some of the stimulants have also been employed such as Brandy, Punch and Ether. Dr. Col. [illegible] of Centreville has employed Ether successfully in

[illegible] the [illegible]. The [illegible]
[illegible] I [illegible] to [illegible] day, the [illegible]
[illegible] [illegible] in the [illegible] [illegible]. The
[illegible] [illegible]. The [illegible] under the [illegible]
of my [illegible], and, by [illegible], from disease.
Dr. Gilmour has [illegible] [illegible] [illegible]
[illegible] [illegible]. He gave both a [illegible] of
this [illegible], [illegible] in a glass of [illegible], [illegible]
[illegible] at the moment of the first chill, or at
intervals of [illegible] for [illegible] in the day preceding
that of the attack. Blood all of my [illegible],
and [illegible], [illegible], without [illegible], have been
employed in this disease. The cold shower bath,
and douche have, sometimes been employed with
much [illegible], [illegible], but [illegible], been
employed with, much [illegible]. After mentioning
all the remedies used in this disease, relapses are
[illegible], information which the use of the remedy
should be, provided, in for several months; so as
to eradicate any [illegible], which it
may have to return. Sometimes a long voyage

to be of likely a power of [illegible], which
the disease [illegible] to return, the chief of the
patient during the disease, should be just and
[illegible] of digestible, wine moderated. Much of diet
bitter, [illegible] meats, [illegible] that are easily
digested, for both regard, to the quantity of
food, the patient should avoid as much as possible
immoderate repletion, he should not expose himself
to the hot sun, and to the morning or evening
air, nor go to bed early in the morning fasting.
For common chetten, recommend that the patient
be kept [illegible] under the influence of vaccine
I have tried this plan and can say that I
think it has been of benefit to me, I have
never been attacked with the disease after
adopting this precaution, I took the grain three times
a day, large bits are used as a fumigate,
[illegible] is said to be a fumigate in dangerous
places. It is also effective, not [illegible] avoiding
his usual diseases, the [illegible] in the upper stories
of the dwelling are not as healthy, to be attacked

of their discoveries, have placed their
names [illegible], [illegible], they seem to have
the power of destroying the virulent poison and
though chemistry has not failed to detect
this subtle poison, that is [illegible] the
[illegible], yet from the wonderful advances
made in this science, it is not unreasonable
to look forward with much hope to the time,
when the prevention of this disease may be ever
established, with as much certainty, as now the
cure by the great Physician.;

An
Inaugural Dissertation
on
Opium
Submitted
to the
Examination
of the
Provost, Regents and Faculty of Physic
of the
University of Maryland
for the degree
of Doctor in Medicine
by
Philip P. Field
of
Baltimore
Maryland

In compliance with the time honored requirement of the Faculty of Medicine of this University, I take pleasure in submitting to their examination this Inaugural dissertation on the subject of Opium & hoping that it may meet with their approbation. The subject which I have chosen, is one that has been the theme of many an applicant for the degree of Doctor in Medicine and has been dwelt upon in all its phases, both by the student & teacher, until it is exhausted, hence I feel much diffidence in offering this to your inspection

The Papaver Somniferum is an annual plant cultivated in Asia minor Egypt and some parts of Europe for the juice of its capsules. It is also cultivated for a bland oil which is obtained from the seeds and eaten as food. The plant generally grows from two to five feet in height. When it has attained this height; several branches spring from it which as well as the main branch terminate in capsules. The leaves are large, their color green and glossy. The capsules vary from the size of a pigeons egg to that of a hen's egg. Externally the capsules present many small radiated figures resembling burrs. Internally it is separated into many cells, the partitions of which are thin membranes. Each of these cells contain seed varying in color according to the species of Poppy from which they are procured. The Opium or Juice, is obtained from the

capsules, by horizontal incisions being made in them, care being taken not to penetrate the cavity, then a white opaque fluid exudes along the incisions. This is left exposed to the air for about twenty four hours, then men, women and children proceed to the fields prepared with large blunt knives with ~~which~~ which they scrape off this secretion, which is now of a jelly like consistency. The juice is then put in earthen vessels, having occasionally mixed with it, water & saliva; then it is taken wrapped in dried leaves and is ready for commerce. During the preparation of opium it is frequently adulterated with different substances such as gravel pieces of wood and frequently portions of the outer coverings of the capsule. Good opium is opaque, compact and has a disagreeable narcotic odor. The color is brownish externally, internally of

a brownish red. It is partly soluable in water Alcohol, Ether, Vinegar, Citric Acid &c Good opium when drawn across a piece of white paper the line which it makes is not un-interrupted, but broken into many small granules, which are of a shiney and some-what metalic appearance. When taken in the mouth it should not color the saliva with a deep tinge. The taste is bitter and somewhat acrid. The watery solution after being filtered becomes transparent and possesses acid qualities, If Acetas Plumbi, Sulphas Zinci, Sulphas Ferri, Sulphas Cupri or the infusion of Galls be added to this solution precipitates are found by the chemical tests. Opium has been ascertained to be composed of sixteen different substances, only three of which, however are much used, Morphia, Codia and Narcotina, Morphia is the most important of the extracts

of opium and is the active principle. This alkaloid may be separated from opium by digesting its watery solution in acids. It is used as a medicine when opium would be too nauseating, when we want sedative effects to be kept up for a long time or when we wish them quickly produced. Narcotine is obtained from the watery solution of opium by evaporation. It is highly essential that we should become acquainted with the effects of opium given in different doses and upon different persons. We should find no other medicine producing two opposite effects when administered in different doses, nor do we find any which produces such a difference in action on different individuals. The effects of this drug are two-fold, those brought on by small doses and those by large ones. A small dose generally acts upon

an healthy person, as a stimulus. We find the pulse quickened, the respiration faster, the muscles strengthened and the intellect brighter; these are described as the Primary effects, and are soon followed by those of an opposite character called the Secondary effects. The pulse is weaker, but quick, the respiration is slow and easy, the muscles are relaxed there succeeds stupor, which renders the mind inactive, and finally and almost irresistible desire to sleep seizes the patient. A full dose differs in its effects from a small one by the shortness of its Primary and the longer duration of its Secondary effects. If a full dose be given to a healthy person the Primary effects are scarcely, if at all perceptible, and if perceptible they are quickly followed by the Secondary. It may be some time after the administration of the drug

before any effects are perceived. And again its operation seemes to take place at once and without any warning, and when this is the case it is considered a dangerous sign. The pulse becomes slow and full respiration slow and sometimes stertorous. The muscles of the extremities almost incapable of supporting the weight of the body, the mind is impaired to such an extent as to make the patient unconscious of his condition. The pupil is contracted and stationary, the peristaltic action of the alimentary canal is stopped, constipation ensues, the appetite is impaired, the surface of the body is moist and lastly the patient sinkes into a deep sleep from which he can scarcely be aroused. If let alone these effects continue for about twenty four hours, during which time he sleeps without interruption, when he —

awakens he complaines of violent head-
-ache, he is thirsty his tongue and fauces
being dry and parched, his cravings
for food are excessive. Idiosyncrasy causes
opium to produce entirely different effects
upon different individuals, on some a
small dose instead of producing a stim-
ulent effect will cause sedation & Vice Versa
The cause of this differance may be due
to either a differance in the nervous
distribution or a differance in the absorb-
ing power of the veins and lymphatics
or it may be owing to the different
states of system in the same person.
We also find this drug to produce effects
peculiar to the disease and to the time at
which it was administered. Habit exerts
a considerable influence over the operation
of opium. Persons who have become accus
-tomed to its constant use can take large
quantities without experiencing any

sedative but only its stimulant effects. The Orientals are notorious for their ability to large quantities, which are used for the same purpose that we employ Spirituous liquors. There is also a great resemblence in the action of the two. The orientals on fast days always resort to this drug for its power to appease the cravings of hunger and thirst. It also gives the power of enduring great fatigue and hardships, hence the inhabitants of the East invariably, when going on a journey, prepare themselves with a quantity sufficient to last until their return; when they are fatigued they resort to this potent drug to renew their energies and give new vigor to their flagging powers when thirst overcomes them again they fly to their magic and soothing companion. When the drug begins to exert its influence. they forget all their toils,

and they feel as fresh and as active as when they began their travels. Its temporary effects on different persons greatly vary as to length of duration and the degree of exhilaration. Some under its influence appear raving maniacs, others again imagine themselves Kings, princes and other important dignitaries surrounded by all the appliances of regal splendor and royal power, while others again are exceedingly meek and lowly and become much humbled in their own estimation and very amiable. Through its influence the dominant qualities of the heart and mind develope themselves, the caution and reserve which are wont to govern them relax their hold and the true character appears and holds its sway for a time, then succeeds that quiet and gentle languor, that sweet and happy desire to rest which the followers of Mahomed believe is the

holy prophets spirit exerting its invincible and soothing power over all their faculties. No medicine of the materia medica is so frequently used or sooner to meet so many indications. There is scarcely a single disease which in some part of its course opium is not beneficially administered. If we wish to relieve pain or suffering in injuries or disease or if we wish to make birth easy to the mother or to calm the troubled spirit when do we find a remedy so powerful so able to meet all the indications more promptly and with more benefit than opium. Or when death is the inevitable termination of any disease when his dieing pangs would be tortuerous and excruciating both for the patient to endure and his friends to behold. how may his agony be relieved and the fell destroyer be deprived of half his terrors?

Opium is answered can smoothen the road to death and cause the visitation of this unwelcome angel to be looked upon with comparative joy and happiness. Its use is not alone confined to the treatment of medical cases, but Surgery & midwifery receive assistance from this powerful auxilliary. By the Surgeon it is given to blunt and destroy the pangs and sufferings of painful operations, to calm & soothe irritable ulcers and painful cancers and to influence all other Surgical diseases. By the Accoucheur it is administered to allay in part excession and too severe labor pains. In Puerperal fever it is a remedy of vast importance. Neither has this powerful agent escaped the notice of the Chemist; he has analysed and ascertained its composition and discovered the various tests for its presence. Nor does the Pathalagist overlook its different effects

on various parts of the body. And last though not least important duty is for the Pharmacopœist to collect and classify those results which have been noticed by the Physician, Surgeon, Accoucheur, Pathologist and Chemist.

Opium serves various purposes and to meet various indications apparently opposite and contradictory in their nature. The most important office of this drug is to relieve pain and irritability, to prevent spasm to allay watchfulness, to check morbid secretions, to produce diaphoresis, to stimulate and promote sleep. The efficiency and power of other remedies can be increased and strengthened by the combination of opium with them. The first indication for its use that we shall notice is its power to relieve pain and irritability, hence in neuralgia it is one of our most useful remedies.

In painful affections of the eye it is used in preferance to any other external application In the various forms of inflammation, it is highly serviceable, although there is much dispute and great diversity of opinion on this subject. Yet I think it can be administered with entire safety and much benefit in such doses as are necessary to relieve the pain of this disease. To prevent spasm; it is a useful remedy in subsultus tendinum consequent upon typhoid fever. It is used with benefit in spasm of the muscular coat of the intestines which may be owing to an inflammatory condition of the adjacent membranes or to the action of some acrid poison. In spasmodic Asthma it is powerful in relieving suffering. It has been used in Tetanus with variable success, in some cases it has resolved the spasm and in others it has produced no change. In this

disease its action, is peculiar and its influence over the system variable: the largest doses without exerting any visiable effects have been administered. In the Idiopathic form of Tetanus Opium is sometimes useful in preventing the fatal consequences of the disease, but in the Traumatic variety very rarely is any good to be obtained from its employment. In Typhus or Typhoid fever Opium is a very valuable remedy to prevent watchfulness. In such cases when the patient from nervous irritability cannot sleep and when it is necessary that the soothing, calming, invigorating effect of sleep should be obtained on account of his already debilitated condition, a small dose of Opium will have the desired effect and the patient awakes, much refreshed and relieved. Opium is very useful in checking the morbid secretions from the mucous membrane of the intestinal canal,

which causes Diarrhoea and Dysentery.
Upon these diseases opium acts in two ways, first by checking the mucous secretions and secondly by diminishing the peristaltic action of the muscular coats of the bowels. In checking perspiration it is useful in combination with various remedies, to produce diaphoresis, such as Ipecac. Sulphate of Potash &c. In rheumatic affections it is useful to allay pain and promote healthy action of the Skin. In proper doses it stimulates both body and mind. It is used with powerful efficacy in almost all painful affections and nervous derangement. In the Delirium of the drunkard is its power most wonderfully and magically displayed. Let him rave like the maniac, let him be harrassed by the most tormenting and horrid visions and after opium has had its control over him he awakes a changed man his madness, his delirium

have vanished and in a very short space of time he has become a rational and sensible being. In Phthisis it is given to allay the violent cough which continually harrasses the patient and prevents him from obtaining sleep: also it is administered to check alvine evacuations which wear out the remaining strength of the emaciated sufferer. In Pneumonia it is to be given under several cautions. When there is restlessness dyspnoea and severe cough it should be administered in sedative doses or the symptoms will all be aggravated if the doses are too small to bring on a perfect state of sedation, and stimulate all the organs to increased action. It may be necessary to precede its administration by blood letting when there are plethora and much vascular excitement, and generally its effects are much increased when following

this great antiphlogistic remedy. In Catarrh opium is very useful, especially in the incipient stages when Cough and nervous irritability are present & before the secretions from the mucous membrane begin to pour out, then one dose will often be sufficient to cut short the disease. But in the second stage when irritation has taken on the form of inflammation and when the secretions are poured out copiously then opium is contra-indicated, because it will check the secretions and thus take away that means by which nature is endeavoring to relieve herself of this malady. In the third stage when instead of inflammation we have irritation and the secretion and discharge of mucous gradually diminishing opium in combination with Ipecac will frequently accelerate its departure. In Bronchitis, a disease similar in

character to that last mentioned except its location being different, it is used with the same success.

It is useful in Variola where there is much irritability, when the eruptions fail to appear in the proper manner and when there supervenes restlessness and wakefulness. It should be administered with some laxative to counteract its constipating effects It can be employed with advantage in Scarlatina when the eruptions are tardy in appearing and insufficient in maturing; but when we find any traces of inflammation within the throat its use should be immediately abandoned as dangerous. In Dysentery it is an indispensible remedy, but when the febrile symptoms run high and have an inflammatory character it is generally proper to lay it aside, But when the inflammatory symptoms have been subdued by the proper antiphlogistics

agents, preceded by a laxative it may be given with the greatest advantage especially in the latter stages when the tenesmus is great and the desire to go to stool frequent arising from an irritable condition of the rectum. This remedy can be employed with almost equal success in the form of a pill taken by the mouth or a suppository placed in the rectum or an enemata. In the chronic form of this disease opium combined with calomel is very useful this prescription meeting two indications, the opium calming the irritation and the calomel acting as an alterative. In Diarrhoea after the bowels have been evacuated by some brisk cathartic, opium in combination with calomel or Acetas Plumbi evinces its happiest effects in checking the profuse discharge and calming the whole system. In Gastritis it is highly useful, when it has been preceded by the

proper depleting remedies, in allaying violent pains and irritability when neither food nor medicine is retained in the stomach. In Enteritis this agent is employed under nearly the same circumstances and indications, with this exception that in gastritis the stomach will retain its food with difficulty while in enteritis after it has passed the pyloric orifice it is a rare ~~thing~~ occurrence for it to be vomited up, still it will not pass onwards on account of the irritation it exerts upon the mucous coat and consequently through sympathy the fibrous membrane contracts violently and thus instituting a barrier to its farther progress. The rational indications in this case would seem to require some drastic and efficient purgative, but the employment of such a remedy would only increase the irritation and contractions of the intestines and increase vastly the difficulty which we were endeavouring to

overcome. What remedy shall we employ? A consideration of the cause of the difficulty will soon point out to us what must be done. First the irritation caused by the presence of the ingesta in the intestine must be allayed and the contraction of the muscular coat of this organ must be removed. Opium is the agent which will meet both of these indications in the best possible manner, allay the spasmodic action of the bowel which will resume its peristaltic action and the contained matter will pass on to its destination. We have examined and pointed out the various diseases in which can be used with advantage this powerful drug, but there are many contra-indications for its use which should be well understood and observed. We pointed out its influence over the vascular system dependent in many instances on the peculiarities of the individual to whom it is administered. It is a difficult-

matter to state with accuracy the indications and contra indications for Opium, because the same condition of the circulatory system may be caused by various and indeed opposite agents, which in some it may prove an useful remedy and for others a dangerous application, and also the effects of opium on the circulation are not uniform and hence not to be relied upon. But this rule may be laid down which will be somewhat universal in its application; that Opium is objectionable when there is much increased activity of the circulation, with great power, or where you have diminished secretion in any tissue, and when the vascular system is diseased or where there is much tendency to coma. Opium is admissable in a decreased degree of vascular power as in hemorrhage, in increase of pulse with nervous excitement but without febrile or inflammatory symptoms, as in some forms of hysteria, and in various

unhealthy conditions of the pulse attended with pain, spasm or excessive secretion from any surface without inflammation.
This powerful agent has also great influence on the organs of respiration. If there is great dyspnoea arising from the want of sufficient nervous energy Opium is strongly contra-indicated. It should not be employed in cases where the venous blood is improperly arterialized.
If there is diminished secretion from the stomach and intestinal canal, very great thirst, loss of appetite, obstinate constipation, a failure in the liver to secrete bile, Opium is forbidden. But under proper circumstances this remedy can be used with much advantage to allay when of the inflammatory kind, to allay excessive irritability of the digestive organs, to diminish the irritability and contractility of the fibrous coating of the intestines & checking inordinate amount-

of secretions from their mucous surfaces.

Opium exerts a powerful effect on the Cerebro-Spinal system, hence it is a remedy that should not be employed in Apoplexy, inflammation of the brain or paralysis, because it tends to increase the intensity of the symptoms. But when these dangerous symptoms are absent then the remedy can be employed with advantage to promote sleep, to stimulate the Cerebro-vascular system, to diminish undue muscular contraction & sensibility.

The effects of Opium on the urinary system are not fully agreed upon by different authors, but it is pretty well decided that it has the power in most cases of checking and diminishing the secretion of urine. This remedy should not be used when there is diminished sensibility or contractility of the ureters or bladder, but under proper precautions Opium may be very useful

in diminishing the irritability of the Kidney in the passage of renal calculi, and also will be useful in relaxing the ureters when calculi are passing along these tubes. It also has powerful influence over the irritable condition of the bladder produced by the use of cantharides or remedies that act upon this organ. This remedy is much celebrated among the Orientals as an aphrodisiac agent; but it only effects the genital organs through the medium of its constitutional influence, hence it can be said to have no specific power over the venereal passions yet it can be used with advantage to allay pain in the genital organs of either sex, and not often is its employment attended with retention of urine or of the mammary secretions in females. As a very small quantity of Opium is sufficient to destroy the life of a child at the breast or the foetus in utero

therefore it should be taken with great caution by pregnant women or wet nurses. Opium can be administered with some influence over the cutaneous system, but not with such marked power as in the nervous or vascular system. It is given with advantage to allay pain or excessive irritability of the skin and to produce or promote cutaneous perspiration. This remedy should not be employed when the skin is very hot, because it has been found to be productive of injury. The propriety of its use in any affection of the skin must be determined by a reference to the system generally. Opium acts upon all the organs and influences all their functions through the medium of its absorption. The constitutional effects of this drug are commensurate to the absorbing power of the tissue to which the application has been made. When it is thrown into the veins the effect is powerful

and rapid, similar to its operation when taken into the stomach or applied to the denuded cuticle. As a proof of the assertion that the active principles of this drug are absorbed, is that opium has been detected in the urine, in the perspiration & in the other secretions and exhalations. Besides these effects which I have pointed out, there are others which are only secondary and being unimportant — I shall let pass unnoticed. We have endeavored in this essay to state the natural history the cultivation, the collecting, the commercial history the medical and surgical influence of opium over all the tissues and diseases of the body, and also the indications and contra indications for its use and the modus operandi.

Inaugural Dissertation,
on Medical Topography
Submitted for Examination, to the
Provost, Regents, and Faculty of Physic
of the University of Maryland
For the degree of Doctor of Medicine
by
Henry W. Davis
of Indiana

1852

To

Professor Samuel Owen

this thesis

is with feelings of gratitude

respectfully inscribed

By his pupil

Henry W. Davis

of Indiana

Medical Topography

The economy of health, is a subject of universal interest, concerning all alike from the humblest to the most influential in every community. Among the earliest records down to the present time, we find that disease with its phenomena has been a subject of patient investigation by acute and profound thinkers. Wisdom Science and Art, together with every expedient which cunning might suggest has been brought in requisition to preserve health, and ward off until the latest moment, the incursions of time and disease on the constitution of man. In countries where climatic changes are comparatively regular and atmospheric

fluences fully understood, the laws of health, and treatment of disease are reduced a science, as near perfection, as can be expected, for independent of the infinite variety of constitutions to be found in any country, these too subject to the many vicissitudes of age, sex and mode of living, diseases and pestilences are often aggravated, by external causes, to various degrees of violence and malignancy, these mutations ever have, and ever will be an obstacle to the perfection of the science of medicine even in those countries where climates are least variable, and disease most carefully studied, In tracing the history, character, or particularly the treatment of any special disease

we should always take into consideration the fact that it is more or less modified by the peculiarities of soil, climate, vegetable and mineral substances, with an innumerable variety of causes native to every extensive country. Under these circumstances, it is evident that not only would there be variations in the character of disease, but also in its treatment. And those general laws which would be applicable under one variety of circumstances would, without material modification, be wholly impracticable under others. And admitting that the various systems of medicine are based on analagous principles, yet in different countries these systems may present a diversified practice, as a

deviation from established rules is always
justified and rendered necessary. Whenever
morbid changes make their appearance
be modified by causes external or internal,
as to demand it. And as a general rule
these deviations are made, providing always,
that the practitioner has brains enough to
detect the evil, and apply the remedy.
In the Great Valley of the Mississippi
river, diseases present a different aspect
from those found in the States bordering
on the Atlantic. And it is but rational
to suppose that they would require diffe-
rent modes of treatment, which should be
adapted in accordance with the peculiarities
evident to these two sections of Country.
And although with regard to the first it.

may be said, that wherever a knowledge
of these familiarities has suggested it.
change has been rightly made with
good results, still it must be confessed
that notwithstanding the amount of
study and labor devoted to the investigation
of diseases and their complications, there
are many puzzling questions yet unsett-
ed. Many things not yet understood,
and although they have engaged the
attention and employed the pens of men
of the keenest intellect, yet they have turned
from their researches either baffled in their
attempts to solve the problem, or have termina-
ted their labor in the production of some
theory not sufficiently satisfactory and
unable to support itself against the much
fallacity

of opposing circumstances. The peculiarities which originate these difficulties are many and various, of which it will be sufficient to mention one. This is the occurrence rather recurrence of what is termed a sickly season, when the periodical return of the various diseases incident to the section of country are expected. This in itself might easily be explained, were it always attended by circumstances in which could be detected the predisposing or exciting causes, and in which circumstances there was an evident similarity, but it is from the fact of their developing themselves under peculiarities diametrically opposite in their nature and effects, that a true explanation is difficult to arrive at—

In some localities may be observed a population comparatively healthy, while within the space of a few miles, in section of country similar in many, not all respects, subjected to the same variations of temperature, we find perhaps three fourths of the inhabitants writhing beneath some form or other of disease. Again the one may enjoy complete immunity from sickness of any kind in a mild form, for a long period of time. When without any apparent cause, and in an unaccountable manner, it will be subjected to the invasions of disease, wide spread, and of a nature almost intractable, sufficient to baffle the skill, and render the efforts of the Physician, in many cases, ineffectual,

While the other often suffering year after year from the effects of malaria caused of unwonted virulence, it suddenly released from the scourge, and blessed with a season of health. What caused the disorder in the health of the two places, and what reason can be given for the variations in the character and locality of disease. Does it originate from miasma generated under some circumstances, and not under others. Is it occasioned by a difference in the habits of the people, the provisions of the soil, the nature of the water, or can the true cause be discovered and the remedy applied. These are questions which have often been asked, and as often remained unanswered. That the peculiarities which

ave been mentioned, are the effects of causes
o one pretends to deny, but as yet those
auses have not been made sufficiently manifest,
ith this before me I have selected as the
ubject of a thesis, the Medical Topography
f a portion of the Country where diseases
ith all their various fluctuations, are to be
ound in the highest degree, believing as I
o, that an intimate acquaintance with
he Soil, its productions, and locality will
ventually lead the way to the solution
f many of the intricate questions which
main unsettled, I would not have it
upposed that I have taken advantage of
he wide field which opens before me, a mere
urvey of which would require more time
nd labor than is necessary to accomplish

the object I have in view, or than I am disposed to devote to a subject of this kind at this time. Nor do I expect to advance any new ideas, propose any new theories or solve any of the puzzling and mysterious questions connected with the subject.

It will be my object to record the few facts drawn from observation, while a resident in that portion of the country, which I shall attempt to describe, and I trust I will be excused from doing any thing more by confessing my inability to perform that which has often been attempted, and as often been rewarded with unsuccess. Yet the theme is a noble one teeming with interest and replete with matter calculated to engage the mind and pen of any one who will

make it a subject of study. Much
yet unwritten in the history of Medicine
s to be found in the Great Valley of the
West, a source from whence the future
Historian will draw largely, material too
will of both interest and profit. It
s a field for investigation in relation to
hich it may now be said, to be a Wilderness
ignorance yet unexplored. In tracing
his subject throughout, we should take
to consideration not only those peculiarities
hich give rise to so many morbific causes &
hich exercise so marked an influence in
e Generation and modification of diseases.
t also those circumstances which may
ranked among the predisposing causes.
nd this would lead to a minute history

of the climate, soil, productions, and locality of the country, the manners, customs, moral and intellectual attainments of the people. An extensive subject, rather too voluminous for present purposes, therefore I shall confine myself to that portion which relates to the soil, its situation and productions, with perhaps a few words about the mode of life, of many of the Western settlers, and even on these points I will not attempt to be minute, but will touch upon those things, which are of such a character, as will enable us to draw conclusions with certainty, and which have an evident connection with the etiology of many of the diseases peculiar to that section of country.

In passing through many portions of the West. particularly that part which is watered by the Wabash and its tributaries, and comprising the largest portion of the States of Indiana and Illinois. the uniformity of feature presented by the lands. will not fail to arrest the attention of the most casual observer, and the conclusions deduced from a superficial observation would be likely to leave the beholder impressed with opinions far different from those which would result from a closer inspection. Although in many respects similar. these lands possess very different characters. to detail which will be more facilitated by dividing them according to their various attributes. Beginning with the Table Lands which are

the most elevated, and descending to
the Prairies which occupy an intermediate
position between the Table and the Swamps or
Marshes, which latter are the lowest.
The first or Table Lands take their name from
being the highest in Situation, and are
generally composed of large tracts, here
and there broken into ridges, or relieved
by many gentle undulations, yet as a
whole presenting a tolerably level appearance.
They present but few points connected with
the subject under consideration, as they are
noted for their healthiness, are admirably
delineated for draining off the surplus
water, highly susceptible of cultivation and
are rarely visited by disease of an epidemic
character. The lands which are recognized

by the name of Prairies comprise by far the largest portion. And are much the most valuable. Not only because of their exceeding utility, but because they are generally as healthy as the first portion we described. and which undoubtedly possess advantages that respect over all the rest. This is generally governed by the locality of the plains. for where they are found in the neighborhood of, and merge as they frequently do, into a swamp. it must be confessed that but little can be said in their favor. The appearance presented by one of these prairies at any season is very attractive but particularly so during the months of vegetation, for extent reaching for many miles. the range of vision bounded on all

sides by the blue lake of the horizon.
hile on either hand are spread out the beauties
f Nature in prolific abundance. The long
and prairie grass which every where covers
he surface, the verdant hues relieved by
flowers of every hue and odor, which are thickly
strewn among it, the smooth plain
unbroken by a single undulation, the view
uninterrupted by a single tree, constituting
a scene at once grand and beautiful.
The senses are charmed by the rarity of
he view, and the rich odor which ladens
ery breeze. So that it would be a difficult
ask to convince the ignorant, that mingled
with the grateful perfume, is a poisoned
atmosphere sufficiently potent to generate
he most malignant diseases. Yet it is

well known that in their uncultivated state, these prairies are the sources from whence proceed many diseases, owing to the vast amount of vegetation which is left to decay upon their surface. This being exposed to the changes of the weather, alternately, subjected to the scorching rays of the sun, and saturated with moisture, thus constituting a combination of causes from whence, it is conceded, a large amount of malaria is exhaled. The soil which would not be otherwise than rich after being subjected to this fertilizing process for many years, is well calculated to arrest the attention of the squatter. Here he rects his cabin, and in a few years, he removes by cultivation, the sources of the

Invasion, and is in possession of a valuable farm. While the shattered constitution, and miserable health of himself and offspring, tell too plainly how dearly he has paid for its possessing from these, the attention is next directed to the Swamps or Marsh lands, by far the most interesting portion as connected with our subject. It is here, that we find a multitude of causes, which have originated innumerable theories and speculations, and which abounds in peculiarities, which in an etiological point of view, are sufficient to make it a subject well worthy of research and study. We have no difficulty here in tracing to their source, many of, not all the morbific causes, which are necessary

the production of the various Malarious
fevers. And here we find prevailing Inter-
mittent, Remittent and Congestive fevers of
every type and grade of severity. It requires
astute reasoning to bring cause and
effect in close proximity, as the first is
not evident as the last, which is both seen
and felt. I will make a short digression
here to state one fact in relation to the
marked influence, which the different local-
ities or features of the lands possess, in
defining the limits of disease, particularly
those of a Malarious Nature. Thus while
the Table Lands are seperated from the
Prairies and Swamps, by their elevation only
yet the cases of Autumnal fever, are few and
rare, comparatively. While at the distance

f a few miles it may prevail epidemically
he only observable difference in the two places
eing the lower Situation of one of them,
showing that the poisoning influence is generated
in one place and not in the other, and that
t cannot be conveyed to any considerable
istance, at least, where there is no opposing
arrier, as a range of hills or strip of
imber. This exemption also frequently
extends to the prairie lands which are
nder cultivation, unless, as they frequently
re, merged into a swamp, without any
hing intervening. So perfect is the
ine of demarcation, that on one side
he inhabitants live in perfect security
nd enjoy almost complete immunity from
he encroachments of autumnal diseases

While on the other, they are generally looked
r and so fully expected, that an escape
rom an attack in some form or other, is
enerally looked upon, as a sure precursor
f some more formidable affection.
Returning again to the swamps we may
tate, that, as their character would lead
s to infer, they comprise the lowest lands
, the states, generally found within the
elta of some river, somewhat lower than
he waters at high tide, which subjects
them to inundation at each flood. The
oil consists of rich, black loam, admirably
alculated to support the heavy growth
f vegetation, which every where covers
s surface. Beneath this, and intimately
mingled with the earth, may be found

mmense quantities of decayed and
decaying vegetable matter, the production
of former growths, or the deposit left
by the high waters. Composed of such
materials it is admirably calculated to
retain moisture, and rarely or never becomes
thoroughly dry. Even at the close of a
long continued season of dry weather, when
the upper portion may have become baked
to the depth of two or three inches, the least
pressure will cause the water beneath to
ooze out on the surface. It might be
supposed that, from their near proximity to
the rivers, they would possess superior
facilities for drainage, and that the
waters would find a passage through the
light soil. Yet this is not the case, as

such a result, is counteracted by two opposing circumstances, first, the perfectly level face of the land, whereon all waters tend to remain quiescent, and secondly the soil is so thickly interwoven, with half decayed, and the roots of growing, vegetation, as to render it extremely difficult to cut a passage through it. So impervious is it, that in some places, it is not infrequent to find after the subsidence of the floods, large ponds, or lakes, miles in extent covering the surface of these swamps, and not exceeding in depth, more than two feet, at any point. Here then in these marshes we have collected in abundance, all the materials necessary to the production of Malaria, the influence of which, is

strongly marked by the diseases which
prevail in and about these places. I say
so for strange as it may appear there
are persons to be found living on spots
of grounds entirely hemmed in by marshy
tracts. who are exposed to all their blighting
emanations. who thus willingly risk life
and sacrifice health. for the sake of living
on land. which is not taxed with rent.
And among them we find those who are
subjected to the worst forms of Autumnal
fever, Should they be so fortunate as to escape
its first invasion. they live on. experiencing
new attack year after year, until the
sharpened features, Clay colored hue of
the skin, diminutive extremities. and
enormous stomach, denote too surely

the effects of its inroads on the constitution, to quote the language of another who has better portrayed it."

"Beneath repeated shocks, the wretches prime
The vigor sinks, the habit wells away
The cheerful pure and animated bloom
Dies from the face, with squalid atrophy
Devoured, in sallow melancholy clad"

Not only are remittent, intermittent and congestive fevers prevalent, and constitute the majority of the maladies with which the practitioner has to contend, but all other complaints which "human flesh is heir to" when found in this region are generally complicated with one or other of the above named affections, or so modified and changed, by the influence of the malaria, as to render them

doubly severe, and almost intractable. So universal are its constitutional effects that it holds a controlling influence in the treatment of all diseases. It seems as of

"Water Earth and Air
By secret venom's are corrupted."

that he who implicitly follows the rules laid down in books, for the treatment of any particular disease, and fails to take into account, the circumstances by which it is surrounded, will too often find himself baffled, his efforts fruitless, and his remedies rather powerless, in his hands, or exercising a pernicious influence where under other circumstances, they would effect a cure. Such is a brief outline of some of the characteristics of many portions of the Western Country, and

such the influences which these peculiarities
exert in the Generation and Modification of
Disease. The Subject has already been ably
handled, in a General point of view by
a Writer in the West. And there is yet
sufficiency of Material, yet unnoticed
unfolding the pens of Many of the future
historians of Western Diseases, And it is
not rational to Conclude, that when the
subject is fully understood, it will exercise
a small Amount of influence in effecting
a revolution in the practice of Medicine.
in relation to the Diseases, incident to
these portions of the Country.

A Thesis on

Surgery

Submitted to the examination of the Provost, Regents and Faculty of the University of Maryland — for the degree of Doctor of Medicine,

by — Edward A. Arnold

of Connecticut,

I have felt much hesitation in presenting the following pages on this occasion, and should have abandoned the idea altogether if I could possibly have found time to prepare a thesis on any other subject. I must state, in justice to myself, that this essay was never intended for a manual of Surgery or as an exhibition of knowledge in this particular department. It might with propriety be entitled — "a selection from notes taken during a course of reading on Surgery." While I am well aware how meagre and insufficient it is, I believe that it contains some of the most important features of this branch and hope that the views taken of them will be found correct.

E. A. A.

Surgery .... is that branch which has for its object the treatment of disease by mechanical means.

This is true only in the strictest sense, for Modern Surgery occupies a much wider field. The definition is given simply in contradistinction to the practice of Medicine, which denotes the treatment of disease by the administration of drugs and other substances supposed to have a sanative tendency. Surgery and the practice of medicine are now one and inseparable. Their principles are the same throughout and the exercise of their branches requires the same fundamental knowledge. — The surgeon must necessarily be a thorough anatomist. He must be well acquainted with pathology especially that of inflammation, and its treatment; since it not only follows with extreme frequency those injuries which require surgical treatment, but is itself the source of many diseases which fall directly under this department.

Any morbid excitement of the vital actions not amounting to inflammation is denominated irritation. This state may and often does exist without inflammation. The converse of this is not true.

Inflammation consists in increased vascular action and is characterized by pain, redness, increased temperature and swelling. The results are resolution, exudation, suppuration, ulceration and mortification. The first is the most favorable termination. But it does not always stop thus, often going on till it ends in mortification or death of the part affected. The general treatment of inflammation (commonly termed antiphlogistic) consists in blood letting, low diet, cold and warm applications, counter-irritation and the administration of purgatives, emetics, antimonials, salines, mercurials, narcotics and sedatives. In the use of these means and their proper variation to meet particular indications, there is need of great judgement and skill.

Inflammation of the Bones and their Coverings or Ostitis and Periostitis — may be produced by external violence, by exposure to unfavorable atmospheric influences, by improper use of mercury or by a vitiated state of the system. The characteristics of the two diseases are much alike viz: deep seated pain, intolerance of pressure, little if any swelling. After awhile the skin becomes red, tense and glistening. The symptoms (especially the pain) undergo exacerbation at night. The treatment consists in the application of leeches in large numbers (often accompanied with general bleeding), starvation, the administration of antimonials and saline purgatives. The part should be kept raised and in a rigid state of rest. Hot fomentations may be frequently applied, and Opium given at night to allay pain. After the acute action has subsided, discussion may be promoted by counter irritants and the Iodide of Potassium. If matter is formed, the part must be opened by free in-

cision. Amputation may become necessary.

Inflammation ~~of the~~ of synovial membrane or Synovitis may be brought on by blows, mechanical injuries, wounds or cold; or it may be the result of rheumatism, gout, syphilis or the abuse of mercury. The symptoms are, severe pain in the joint, intolerance of motion, a peculiar distinctive swelling, redness and tenderness of the skin and often violent fever. The limb should be kept at rest. Local and sometimes general treatment, low diet, ice, evaporating lotions, purgatives in moderation, tartar emetic, in some cases calomel and opiates at night constitute the ~~treatment~~. Blisters are improper in the acute stage. In the chronic form of this disease, any constitutional disorder must be remedied, inflammation must be reduced, and finally absorption of the hardening and effusion must be produced.

The constitutional symptoms may be treated

by alteratives and careful attention to diet, and the inflammation reduced by local bleeding, cold applications and rest.

Carbuncle, is an unhealthy inflammation and sloughing of a circumscribed portion of cellular tissue. It is due to a vitiated state of the blood and digestive organs. At first it is a hard, livid-red swelling with burning and smarting pain. The most prominent part soon becomes soft and quaggy and its surface becomes covered with small ulcerated apertures, which give exit to a thin discharge. The tumor varies in size sometimes growing as large as a small plate

Free and early incisions (usually of the crucial form) must be made throughout the whole extent of the mass. Caustic potash must be applied freely. Poultices and fomentations and the water dressing must follow. The constitution must be treated by a cautious course of alteratives. Tonics and stimuli will be necessary, and must be used according to the exigencies of the case.

Inflammation of the testis or Orchitis may be caused by direct violence, but occurs most frequently in conjunction with gonorrhea. It is accompanied by a great sense of weight, great swelling, excruciating tenderness, fever and vomiting. The part must be supported and the patient kept perfectly quiet. This disease is treated by the application of leeches, cold and warm lotions, low dieting and the administration of antimonials, calomel and opium. After the acute stage has passed, friction of the part must be made with mercurial ointment and compression effected by means of adhesive strips. Astringent lotions must be applied and Iodide of Potassium given to aid in discussing the hardness which remains.

In the treatment of the various kinds of injuries, which are constantly befalling mankind, the surgeon finds an extensive field for his knowledge and skill — a field belonging exclusively to his department. A very prominent class of injuries is included under the head of wounds. These may be divided into incised, contused, lacerated, punctured, poisoned and gunshot.

In the treatment of incised wounds (which are made by sharp cutting instruments) the cold water dressing is applied till bleeding has ceased — then the wound may be closed. Stitches may be employed, but in a great number of instances, they are entirely dispensed with. Retention is effected by adhesive strips. Cleanliness of the part is all that is farther requisite. In union by the second intention, no stitches are employed. If much inflammation ensue, antiphlogistics must be resorted to, according to general principles.

Usually the water dressing is the only application unless during the latter part of the cure. At first cool, gradually increased to antiphlogistic. If necessary, it must be medicated to suit the case.

In contusions and lacerated wounds (which resemble each other) sutures are unnecessary. The water dressing is applied, cool at first to arrest hemorrhage, afterwards hot and conducted in the usual way. In severe cases much judgement is required to regulate the antiphlogistic means.

Punctured wounds, (which are inflicted by the penetration of sharp and pointed instruments) partake more generally of the nature of incised wounds, and must be treated accordingly. When by careful examination and gentle probing (if necessary) it has been ascertained that no foreign body lodges in the wound, apposition is to be gently and accurately effected. If inflammation comes on, transition is to be

made to the water-dressing and other means to meet the exigencies of the case. Dilitation is often necessary, in order to apply a ligature to prevent hemorrhage, to remove any foreign substance which has become firmly embedded or to allow the escape of pus, when suppuration has taken place.

Gun shot wounds are amenable to the general rules of treatment adapted to contused and lacerated wounds.

In simplyfying the treatment of wounds, modern surgery has made remarkable and valuable improvements on former practice — especially in the use of water dressing and discussing with the cumbrous and (too often) filthy preparations previously in vogue.

In the treatment of poisoned wounds (which results from the bites and stings of animals and from dissection), the indications are, to prevent the absorption of the poison into the circulation, to remove, to remove entirely

the virus which remains and to eliminate from the system what has already entered. In cases arising from the bites of venomous insects and reptiles, a ligature must be thrown around the limb between the heart and bitten part. If possible free excision must be made. If this be impracticable, free incision must be made and the flow of blood from the wound encouraged. Afterwards it is well to apply the nitrate of silver. The general treatment consists in the use of tonics and stimulants. Ammonia and arsenic are recommended, the first as a stimulus, the latter as a supposed antidote.

Besides wounds, there are other injuries of the body. Of these, fractures form a very important class.

Fracture (which is a solution of the continuity of bone) is generally the result of external violence.

It is said to be simple, when there is mere fracture of the bone at one part, and nothing more, compound, when there is an open wound communicating with the fracture, and comminuted when the breaking is at more than one point occasioning several fragments. The long bones are most liable to fracture, especially those of the extremities. The symptoms of fracture are deformity of the part, loss of muscular power, abridgement of voluntary and increase of involuntary motion, with great and constant pain. But the peculiar and diagnostic sign of fracture is crepitus — a sensation of rubbing, grating and crackling, which is imparted to both hand and ear, when the fragments are [illegible] one upon the other. When after thorough examination, the surgeon is assured of fracture, reduction must be accomplished and retention effected by proper position and mechanical means. These will consist of splints applied externally, to relax displacing muscles.

After the splints and bandaging have been duly applied, the parts cannot be too little disturbed.

Dislocation or luxation denotes displacement of a joint, the bones remaining entire. The symptoms are signs of displacement, a swelling where none should be or a hollow where the surface should be even or raised, and shortening or elongation of the limb as the case may be. Motion is much impaired. The distinctive diagnosis between dislocation and fracture is very important. In dislocation no crepitus is heard and the head of the bone follows the shaft when it is moved. When simple extension is made, the proper length of the limb is not restored as in fracture. When reduced, it remains in its proper position. Usually, there is an obvious change in the relative position affecting not only the part but the whole limb. The paramount indication is reduction.

This is to be effected by extension and counter extension. Great force is often necessary, especially if some time has elapsed since the dislocation. In the reduction of the larger joints, constitutional means are frequently used to relax the antagonistic muscles. These consist of blood-letting, warm baths, emetics, enemata etc. The inhalation of Chloroform has of late been employed for the same purpose and with much success. The subsequent treatment consists in maintaining the limb at rest and applying leeches and cold to remove swelling and pain.

The morbid conditions of the eye, make a subdivision of great extent and interest. It requires the surgeon's most subtle skill and perfect understanding. The inflammatory diseases of this organ are numerous, and great care is needed in the application even of the most delicate antiphlogistic means.

Conjunctivitis or inflammation of the conjunctiva — is of several varieties, as active, chronic, purulent or Egyptian, scrofulous, gonorrheal and granular. The most violent form is gonorrheal which arises from the application of gonorrheal matter to the eye. The treatment (which must be active) consists in leeching, scarifying the conjunctiva, applying nitrate of silver, by antimonials and calomel.

The best directed efforts often fail to preserve the sight

Cataract, is an opacity of the chrystaline lens or ~~its~~ of capsules. It can only be cured by an operation, the object of which is to remove the cataract. It is accomplished either by extraction, depression or absorption.

There are some malignant diseases of the eye, which require the extirpation of that organ.

The operation of Amputation — is less resorted to than formerly, and it is probable that the progress of surgical information, will contribute to render it even more rare than at present. It is necessary in cases of recent injury, where reparation is impossible, in case of gangrene and in cases of malignant tumors or disease where a joint or bone is involved. When amputation is decided upon, the surgeon himself should see that all the requisite apparatus is in complete order and readiness. In the performance of this operation, the proper precautions must be taken to prevent hemorrhage, such a wound must be formed as to insure a sufficiency of covering both of skin and muscle, and finally the wound must be properly treated after the amputation.

After cleansing the wound tying the blood vessels and applying the proper dressing, the patient is put to bed, the stump placed on a pillow with the cut surface raised a little higher than

the nearest joint and protected by a cradle from the pressure of the bed clothes.

The further treatment of the patient and of the wounds must be conducted according to the rules laid down for wounds in general. The patient should observe the strictest bodily and mental quiet. The diet must be carefully regulated. At the end of seven or eight days, (if nothing untoward occur) the attempt may be made to remove the ligatures of the smaller vessels. Twice as many days should be allowed to elapse before the larger ones are disturbed. Among the accidents which may follow amputation, is after-bleeding, to arrest the hemorrhage from which, it sometimes becomes necessary to cut down on the bleeding vessel and apply a ligature at a distance from the wound. The troublesome protrusion of bone sometimes renders a second operation unavoidable.

Hernia (which is here limited to protrusion from the abdominal cavity) may be the result of injuries or disease or congenital weakness of the parietes of the abdomen. Some occupations predispose to it. In its cure a grave duty is imposed on the surgeon, since it must often prove fatal if prompt assistance is not given. When the utmost danger threatens, the patient may be saved by a skilful hand. It may be divided into several species according to its situation, as inguinal, scrotal, femoral etc. or according to the condition of the protruded viscus as reducible, irreducible, strangulated etc. The indications for the treatment of reducible hernia, are to replace the hernia and to prevent its return. The replacement is effected by properly directed pressure, and the return prevented by the use of a truss.

In strangulated hernia, the intestine or such portion of it as is not irreducible, must be returned, any constricting part must be divided if necessary, and means must be taken to obviate inflammation.

Among the operations performed on the human body, there are perhaps none which display greater ingenuity and skill than those having for their object the restoration of lost parts and the removal of deformities. Any account of these operations as well as of venereal diseases would of necessity be too extensive to be inserted here.

In Conclusion,

Surgery has risen from under a great weight of prejudice and against strong obstacles if not to the foremost rank, at least to a full equality with its collateral branches. At this day, the reputation and rewards attendant upon its successful practice are sufficient to induce the most talented and worthy to enter this field of labor. That such is the case cannot cease to be a matter of congratulation to the profession at large, since the fame which it wins, is

high and enduring and its position un-
approachable by empiricism.

E. A. A.

The phenomenon of Life –

What is life? is a question which has puzzled wise philosophers of old, and it may seem presumption for me to attempt the solution of so difficult a problem; but it is not life in the abstract that curious, inquisitive, that "his vitae" with which our bodies are endowed, that I would consider, so much as the means whereby this unknown principle is manifested and which are cognizable by our finite minds –

Physiology is one of the most important branches of medical study, for how can we seek to restore the ravages of disease in our bodies without a proper knowledge of the healthy functions of the vital organs that compose them? Some understanding therefore of the nature of the different parts should form the foundation of our phy-

Scians Scientific Minds age. And as their combined operation as displayed in the maintenance of life this Subject has suggested itself as most practical and useful. Men have confined at the wonders of Supernatural power displayed in the miracles of Sacred Writ-but-can forsooth their contracted minds be unable to comprehend the workings of Infinite wisdom yet these same have attempted to explain these phenomena of no less wonder which each Scientist one manifesting themselves in their own bodies - Thus man has verified the Poets line "most ignorant of what his most assured his glassy essence" There are certain truths connected with our mysterious existence which may be known and fully investigated and there are others, no less interesting, which in the present state of our science must rest unexplained. Thus our bodies are nourished, our vital decay loss and repair are carried on with such perfect harmony, how that peculiar principle

we call disease, disorders these organs in the performance of their various functions we may with some accuracy understand and describe; but what connection have the soul, intellect and consciousness, with the development of our animal bodies, who can explain, who can understand? Ancient philosophers with astonishing zeal have endeavoured to penetrate the relations of the soul to animal life & thus leaving the province of truly philosophical research for that of fancy, have actually retarded the progress of physiology rather than contributed to its advancement. There are certain limits of natural science which it is impossible for our finite minds to transgress; we can understand perfectly the mechanism of the eye, but it defies either analogy or chemistry to explain how the rays of light act on consciousness to produce vision or the vibrations of the air communicate sound to our minds. It is this, then, that lies complete ~~in the~~ connection with our existence

these facts which are well established and which require only a knowledge of them to impress their importance and practical value that I would in a cursory and imperfect manner detail.
Physiology teaches us that all parts of the animal body are produced from a special fluid circulating throughout its organism - containing the various constituents of each cell and organ, which by virtue of some unknown influence residing in the part are appropriated to their specific nourishment.
Furthermore it is well established that at each moment there is a continual change going on in the animal economy, various structures are constantly being transformed into unorganized matter and as constant a renewal is kept up. Every motion, every mental affection, every thought are followed by changes in the chemical ~~constituents~~ of the various organs concerned in their production.
It follows therefore, that the most important

phenomena of organic life are exhibited by the blood and by the functions of nutrition and reproduction. The blood is a fluid of a rich beautiful color, possessing within itself all the ingredients necessary for the nourishment of our bodies. Its chemical constituents are water, corpuscles, fibrin, fluid albumen, extractive matter, various salts and fat. Its composition therefore is identical with that of flesh. This life-giving fluid is formed from our food combined with the oxygen of the atmosphere, and the important changes which our food undergoes are wrought in the process of digestion. By this our food is made fit to be absorbed and its nourishment yielded up to the blood to be dispersed to all parts of our bodies for their formation and repair. It may be divided into two stages, chymification and chylification. The first of these occurs in the stomach, where the food, or a mass of various heterogeneous substances is reduced to one homogeneous mass

by the action of the peculiar secretion of this organ, the gastric juice. Entering next the duodenum it receives the secretion of the pancreas and liver and is thus reduced to chyle. Passing along the intestinal canal, the nutritious portion is eagerly absorbed by the lymphatics, an operation curious and wonderful, baffling the understanding of man to fully comprehend it — and through the agency of these vessels carried into the circulatory system, destined to repair the noble workmanship of the creator.

This system is composed of the heart, arteries and veins — The heart is the head of organic life, the great prime mover of all its manifestations, the fountain from whence flows that precious fluid which nourishes the entire man. The arteries like kindly streams have each part of our bodies with their refreshing waters and distribute to every part its peculiar sustenance — The veins return the blood to the heart, deprived of its

vanishing, is rendered and passed to the all-pervading principle to life to be again purified and settle for the maintenance of our existence. Respiration may be considered an assistant to the circulatory system for by it the blood is oxygenized by coming in contact with the atmosphere in the lungs. In addition to these we find other organs for the preservation of organic life, namely those whose functions are absorption, secretion and excretion. These are the immediate means by which nutrition and reproduction are performed. Their most important actions have been incidentally mentioned in speaking of digestion and their proper action are necessary to the maintenance of health. Thus in an exceedingly simple manner is our organic life sustained — yet who can fully comprehend the wonders that are here displayed. How with what harmony the various organs perform their functions — as St. Paul says "There is no schism in the body" but all parts act in concert, working together to effect the same end —

The most intimate sympathy exists between all these parts and thus every member of a family is affected by the disorder in any one member. But this is not all of that wonderful machine which in its structure is beautiful and curious and in its actions is mysterious and past finding out. There is a system at work within this as it were more complex in its nature and more allied to the spiritual in its manifestations. The nervous system is composed of two subdivisions, the cerebro spinal and the sympathetic. The first encircles the brain and spinal cord, the nerves proceeding from these and the various ganglia which are located within them. The sympathetic is that named by Bichat "the nervous system of organic life" is composed of a chain of ganglia situated along the vertebral column from the cranium to the pelvis and supplying the viscera in the thoracic, abdominal and pelvic cavities. To give a description of these in detail, demonstrating their peculiar structure and mode of action would consume volumes & then the subject is obscure — in fact much con-

connected with them is so hidden from our view and imperfectly understood even by the wisest physiologists that it would be more than folly for me to repeat their various theories — The first in its actions bears a more intimate relation to the mind and is chiefly concerned in the production of volition & sensation and all those acts which place man at the head of the animal kingdom. This by the same author above quoted is called "The cerebro spinal system of animal life" The other is productive of those functions which we observe alike in the brute animals. The brain, situated above all other parts of the body, emblematic of its superiority, is to the nervous system what the heart is to the circulatory — It is contained within the head, which as a lofty citadel overlooks all the subordinate parts, distributing to each the commands which with lightning speed are executed by each remote organ — It has a communication established with every fibre of the body and the nerves like magnetic wires transmit each dispatch. These all act from the influence of certain stimuli. Some answering only to the calls of special

stimulants are termed "nerves of special sense." These with others receiving their influence from without and conducting the impression to the brain are "afferent" a kind acting from the centre to the surface have received the name of "efferent." As I have before mentioned the nervous system seems more intimately connected with the immortal - his spiritual and intellectual character and thus it is that their functions are so obscure and difficult of explanation - We know that the nerve fibres serve only as conductors of impressions which impressions are produced by specific stimuli but how and why these actions manifest themselves is more than science has ever been able to explain - Our finite minds can give some satisfactory reason for the various actions in our material frame, but we are confounded at every step when we attempt to investigate.

"That intellectual being
Those thoughts which wander through eternity?"

When we contemplate the structure of our bodies we are struck with the simplicity of some parts, the perfect

ical and anatomical office to perform - yet perfect as is the human frame, so well adapted as is each organ for fulfilling its proper function, were it not for the sustaining power of Him who made it such all would be confusion and discord - The desire for life, strongly as we cling to it, - the fear of death and that dreadful hereafter, are not sufficient security for the proper conducting of all the vital motions with that constancy and uniformity necessary for their preservation - Reason would have been too slow in its action and often would the heart stand still and the life-blood cease to flow were they as entirely under the control of Reason's authority as are the voluntary muscles. This then shows us the true origin of that vital principle regarding which speculators have advanced such various theories, and that mind must be most strongly prejudiced by the bewildering theories of false science which seeks the cause of the involuntary motions in dead matter or organization rather than derive them from the great Fountain of all Power and all Life - It would be almost presumption to suppose that the finite can fully comprehend the Infinite, and . he.

has increased in his opinion of his fellows of the Almighty who hopes to understand all respecting man, His greatest work. How noble then is his calling who has for his care the preservation of life and the alleviation of the sufferings to which flesh is heir! and how great is the responsibility of every physician who has committed to his charge aught so important as human life. Great will be his reward then, if with adequate zeal and industry untiring he strives to fit himself for his noble office. Often will he be harassed by anxiety unutterable and his body wearied with overexertion, but sweet will be the recompense to think that he has smoothed the roughened pillow of the exhausted sick and alleviated the sufferings of the truly afflicted.
Let him therefore consider the dignity of his calling calming the anxious mind and affording health that greatest of human blessings to the ladies of his fellow-creatures.

Wm. A. Markham

Virginia.

A Clinical Report of SIX CASES

Submitted for the examination of the Provost, Regents & Faculty of Physic of the University of Maryland for the Degree of Doctor of Medicine

by

E. E. Stonestreet
of Maryland.

Baltimore Md.
March 1852.

No 1 Chronic Pleurisy.

Daniel Sullivan, Aged thirteen years entered Infirmary March 1st. Resides in Baltimore, came from Ireland seven months since, About five weeks ago he was taken with a violent cold and had a running from his eyes and nose, face swelled sore throat - severe cough with an acute pain in the left side, - denies having had a chill - was sick two weeks after which he became better and went to see his father, where he contracted cold and was confined to bed. He took some pills the nature of which he does not know. saw no Physician and was under no treatment except that above mentioned.

Condition when admitted as follows. Pulse 100 Respiration 35. Physical Signs. In percussion we find complete dulness over the whole of the left lung in

front and behind. By inspection the left side is much more prominent than the right. Auscultation we find entire absence of respiratory murmur over all the left lung in front — behind we have only bronchial respiration on the left side. On the right side we have bronchial respiration in front and behind. By palpation and auscultation we discover the heart to be displaced to the right of the sternum — respiration difficult — alae of the nose expanding very perceptibly during each expiration all the symptoms clearly indicating the existence of very extensive effusion into the cavity of the left pleura. He was bled to ℥viij immediately on his admission and put on,

℞ Calomel grs ij

Potass. Nitras. grs V

Pulv doveri grs X every two hours to effect the system

March 2nd. He feels better to day. Pulse 100. Respiration 35. Same powders as yesterday continued. Three cups were applied to root of lung in front today.

3rd. and 4th. Is slowly improving. Pulse 112. Subsidence of effusion indicated by the inception of slight bronchial respiration in front of the chest, where it was entirely absent at first. He was cupped a second time yesterday over the posterior surface of the affected side. Same powders as at first continued — no evidence of ptyalism yet evinced — is free from pain.

5th and 6th. Very little change. Physical signs very much as yesterday. Pulse 112. Complains of nothing slight, ptyalism is set up today — He took two of the mercurial powders yesterday and one today — is under no other treatment.

7th. There has been little change for the past four

or

or five days — complains of no pain — pulse 112 — since the 6th: he has taken one of the mercurial powders occasionally, on which he was put at first so as slightly to keep up the ptyalism — put on Infusion Digitalis ℥ij three times daily.

March 14th: Condition about the same — pulse 100 — ptyalism improving. Infusion Digitalis continued — had a blister four inches square put on his left lung in front.

15th: About the same. Ptyalism has gone — complains of difficult respiration — put on Cream of Tartar ℥j — lemon peel and sacch: Alba ãã ℥ss. S. Aquæ ℥ij used as an ordinary drink

17th: No change — sleeps well bowels open — slight subsidence of effusion indicated by bronchial respiration — some bronchophony — put on — Blue mass gr j. Squill gr j Digitalis gr 1/4 three times daily

March 19th: Respiration still difficult Pulse 100 — no subsidence of effusion — sleeps well. A blister six inches square was put over his left side complains of pain in stomach — which is attributed to the Blue Mass Squill and Digitalis which were stopped today and he was put on decoction of Senega ℥ij every four hours

20nd: No appreciable change except that he breaths better. A blister six inches square put on the same side, and the decoction of Senega stopped

21 th. About the same — blister drew well but there is no subsidence of effusion. Pulse 112 — put on Iodide Potas: ʒj Unguent: Mercurial ʒvj: Lard ℥j rubbed on those parts of the left side where the blister was not. — also Spts. nit. dule. ʒj —

22d: Potas ʒjß Aqua ℥ij Tablespoonful morning noon and night. continue treatment otherwise

March 27th. No perceptible change. Complains of his side. Some application of the ointment. Pulse continues about 112.

31st. Condition same. Some increase of bronchial respiration on the affected side. Put on Infusion Digitalis ℥ss three times daily — continue Vitis Dulcis and Iod: Potass

April 2nd: But little change — urine scanty. Breathing somewhat easier. Put on Blue mass grs xij Squill grs vj. Digitalis grs ij. into eight pills — one morning noon and night — also Iod: Potass ℥j. Ung: Hyd: ℥vj. Lard ℥ij. to be rubbed on the affected side where the blister was not, three times daily

4th. Effusion somewhat less — less dulness under clavicle — side not so bulging — urine abundant — sleeps well at night. Appetite good

Case No 2. Remittent Fever

Michael Butler, aged 27 years, native of Ireland admitted into the Cathcart Infirmary August 12th, three years in America. Never had ague or any malarious fever previous to this attack. For the last three weeks he has been living on Polytechnic River - nine days sick, being attacked, after exposure to weather and intemperance in drinking liquor, with vomiting of greenish bile, sense of cold along the back - pain in head, back and limbs - thirst followed by fever. - has had a feeling of coldness in back every day with much gastric distress. He cannot say at what time in the day he has an exacerbation.

Condition when admitted as follows. Mind very much confused - herpes about the mouth. Pulse 120 and weak - tongue moist and slightly

fined — tenderness over Epigastrium — skin covered with perspiration — free of a dusky hue — bowels moved once yesterday — vomited today. Put on Quinine grs iij; Blue mass grs v; to be followed in three hours by Castor oil, if necessary

13th: Pulse 120 and weak, tongue moist and brown: i.e. — pulse scarcely perceptible in right wrist stronger in the other — hands clammy and of a sodden appearance. Quinine was given every hour — mustard plaster to epigastrium — and he was stimulated with brandy

14th: Condition about the same — bowels moved four times since yesterday — complains of no pain — pupils contracted and insensible to light. He took Quinine regularly throughout the day, and grs xxx last night. Today a blister was applied to epigastrium and Quinine.

gns iij in the forenoon & ij very hour, brandy freely given. Sinapisms to abdomen and ....
extremities. In the afternoon in attempting to rise out of bed he fainted twice and was with much difficulty restored. 3 o'clock P.M. Mortuus Est.
Autopsy six hours after death. Much rigidity of limbs — spleen much enlarged and softened liver somewhat congested, but not of an olive or slaty hue — peritoneal coat separated with difficulty from liver — gall bladder distended with gall mucous membrane of stomach softened especially at the cardiac orifice — pyloric orifice very much contracted — Kidneys, when cut into, were of a dark red hue and much congested.

Case No. 3 Ophthalmia

John Collins aged 26 years, admitted August 17th: native of Ireland six years in America never suffered with disease of eyes before coming to this country. Soon after arriving here, he was attacked with inflammation of his eyes, which lasted a month. Last winter they again became inflamed and were soon cured. In June last while working in a tunnel, his eyes became inflamed for the third time. The right becoming affected first and soon afterward the other, with much photophobia and lacrymation. He was attended by a Physician who had him cupped, blistered &c. Condition when admitted as follows. Pulse firm much pain in temples — left eye not much affected — right one very much inflamed, with an ulcer cornea in front of pupil. — much

congestion of conjunctival and sclerotic vessels
mucous membrane of eyelids very red. He was
cupped in the temples and bled to ℥xij also.

℞ Hyd: Protochlor grs xij
Pulv. Antim. ℈j
Potass Nit. ℥ss.

Into Chart viij — one to be taken every three hours

Augt. 24th: Eyes somewhat improved. Put on

℞ Vin. Colch. ℥iij
Magn: Sulph: ℥vj
Magn. Carb ℥iij
Aqua ℥vss. Tablespoonful

three times daily. — also

℞ Argenti Nitras grs ij
Aqua ℥ij — to be applied

to the eye.

25th: Eyes much improved. Powders stopped.

as gums are touched and the same prescription continued which was given on the 20th.

Augt. 26th. Eyes still improving - sclerotic and conjunctival vessels much less injected - cornea clearing up - and the ulcer on it improving The solution and wash were continued today

27th: Doing well - The strength of the solution of Nitras Argenti was increased to grs ij to ℥ij Aqua and use mouth wash for Ptyalism as follows. ℞ Tinct. Myrrh ℥ss
Creasote gtt xij
Aqua ℥vss

29th: Great improvement - the lids adhering at night he was ordered an ointment of

℞ Hyd: Rub. Precip grs x
Adipis ℥ij - a small portion to be rubbed carefully between lids at night

Stop solution of Colchicum

9th: Continue treatment

Sept. 1st. Still improving. Ordered an eye wash of

℞. Zinci Sulph grs iv

Vin. Opii ℥ij

Aqua ℥iss

2nd. Very much improved. – treatment continued

Camphora ℥ij Tinct. Opii ℥j – a tablespoonful of which was to be given every two hours until faecal operations were produced

July 22nd. Spent a very restless night – was more or less than twenty times during the night. The discharges dysenteric, – still tenesmus and tenesmus – no head ache – Pulse 108 and softer tongue furred but moist, He was ordered to have bolus gr iv. Opium and Ipecac ãã gr j and if this fail to operate in six hours, a tablespoonful of the above mentioned oily emulsion every two hours until faecal evacuations were produced and after the first operation, Paregoric ℥ss. Afternoon was given, Blue mass grs xij, Opium grs ij, Acetas Plumbi grs xij, to be made into eight pills one of which was given every two hours, and Comp: Chalk Mixture after each movement – – – – –

July 23rd: Feels better this morning - rested better
Pulse 108 but softer - tongue coated but moist
not so much epigastric tenderness - some thirst
He had eight evacuations last night differing
somewhat in their having assumed a diarrhoeal
appearance - being light and watery without
blood or slime - no tenesmus or tenesmus -
Put on Blue Mass gr. ij Opium gr. j Sugar Lead
grs iij Prepared Chalk grs v - every four hours -
also Compound Chalk Mixture after each evacu-
tions

24th: Feels better today - slept pretty well
last night - had seven operations during the
night - still of a diarrhoeal appearance - no
tenesmus or tenesmus at stool no epigastric
tenderness - complains of sore throat - skin
moist - Pulse 104 He was ordered to have one of

the powders of Blue Mass, Opium, Liquorice and Prepared Chalk and if it failed to produce a faecal evacuation in six hours a tablespoonful of the aloetic mixture before mentioned and ℥j of Pregone after each faecal evacuation except the first

July 25th: Condition better this morning – no tenderness – tympanitis or tenesmus – skin pleasant pulse 120 – considerable sore throat – had three evacuations during the night and twenty to 10 o'clock this morning, and still of a liquid character – tongue moist. Was advised to have one of the powders every three hours instead of four, and if the diarrhoea continued gtt x Tinct Opii with the Chalk mixture, made more astringent by the addition of extract Rhatany after each movement

For his throat Aqua Ammonia ℥ij. Tinct. Opii ℥ij. Oleum Olive ℥j to be used as a liniment every two or three hours.

July 26th: Pulse 136 and compressible condition. Urine about the same. Afternoon - Condition much worse. Skin cool and shrunken, extremities cold - pulse small feeble and corded. Tongue coated. Ordered a wineglass of wine. Icy coldness of extremities continues, continue previous treatment.

27th. Condition the same - can retain nothing in his stomach. 2 o'clock Mortuus Est.

Autopsy. Well marked gastric inflammation the mucous membrane being easily pushed aside with the finger. In the lower intestines there was extensive ulceration - presenting the appearance as if something had eaten holes therein

Case No 5. Anasarca

Patrick Egan, Adt. 31, admitted August 20th. native of Ireland, 18 months in America, labourer, no Civil Protection, Intemperate, Habits intemperate, health previous to present attack good, never had malarious fever. — 5 months since had fever which he describes as being worse at night, attended with much sweating lasting about five days. About three days after his attack lower limbs began to swell, abdomen swollen, at the same time and face oedematous, — contracted cough about the same time, which has continued since — never spat blood. He has had pain in his right side below nipple since dropsy began

lies equally well on either side. He was
had rheumatism. Condition when visited
as follows. Pulse 108 and compressible
tongue clean — appetite pretty good — cough
much at night — expectoration mucous
respiration 32 — bowels moved three times
today — urine scanty — much prostrated
abdomen much distended — limbs and
face very edematous — sounds of heart
natural — evidence of bronchitis present.
Ordered.

Infus: Digitalis ℥ss ter die.
also Cremor tartar tea freely
September 1st. Urine was tested but no
albumen was found. Continue treatment
and. Patient much worse. Condition continues
the same. Ord: Infus: Scoparius Tuberosa.

Dij daily — also Pulv Doveri grs x at bed time
continue Infus: Digitalis stop Gentian
Extract.

Sept: 3rd: No improvement —

Ord: Potass: Bi Tart: ℥j
Sulph ℥ss — and
repeat every four hours until it operates
continue previous treatment

8th. Debility increasing — bowels moved
very frequently during the night ...

Ord: Sulph: Cinchonide: ℥j in a tea cup of
Infus: Asclepias Tuberosa every 2 hours —
Cont. Infus: Digitalis:

9th: Mortuus Est.

10th. Autopsy. Thorax and abdomen were
opened. In the former there were extensive
adhesions of the costal and pulmonary

lobe on the right side. The apex of right lung studded with tubercles and contained a small cavity the size of a walnut. The lung on the left side also tuberculous, but not to the same extent. More than two gallons of water found in peritoneal sack. Liver of normal size, but studded with tubercles. The mesenteric gland exceedingly enlarged containing tuberculous matter also.

Case to D. Traumatic Aneurism

Edward Gaffs. Aet: 27. admitted July 16th. a
native of Ireland — has been in this country
5 years — a gun smith by trade — Two
weeks previous to his admission received
a stab on the left side of the neck produc-
ing traumatic aneurism of the carotid
artery. Four days previous to his admission
an attempt was made to tie the artery
but without effect. Condition when
admitted as follows. Pulse good — respiration
natural — appetite good — bowels constipated
the aneurism situated in the lower third
of the artery.

7th: The artery was tied by Prof. Smith
condition after the operation as follows —
Pulse good and not affected by it — respect

rest in the recumbent posture enjoined.
July 18th: Spent an unpleasant night
very restless & sleepless — some head ache
difficulty of deglutition — bowels constipated
Ord: Ob: Tiglii gtt ij Pulv Rhei grs ij
but could not swallow it. Afternoon
evinces great stupor and tendency to coma
and cannot be easily roused
19th Pulse full and strong — skin hot
bowels still constipated
Ord: Venesectio — also Calomel grs vj and
if it fail to operate in six hours follow
with Ol: Ricini ℥ss — also Alk: Solution
℥ss every two hours
20th: Rested pretty well last night no head
ache — no difficulty of deglutition. Pulse 116
and soft — bowels freely moved last night

Appetite poor – skin moist – mind much more clear.

21st: Rested well during the night – no head ache – pulse 100 and soft – mind clear. Ord: Alk: Solution ℥ss every 2 hours

Wound dressed to day – looking well

23rd: Feels pretty well – except debilitated – some thirst – bowels regular – tongue clear

Ligature came away today, this being the most perilous time perfect rest and quiet was enjoined

25th continued to improve and left the house today.

An Inaugural Dissertation On INFLAMMATION,

Submitted to the examination of the Provost, Regents and Faculty of Physic of the University of Maryland, for the degree of Doctor of Medicine,

By

F. C. Neale

3

To

Professor G. W. Mittenberger

This humble essay is respectfully dedicated, as a slight testimonial of gratitude, for the unwearied assiduity with which he has applied himself, often at much personal inconvenience — to the instruction of his pupils: for the kind and active interest he has always manifested in their advancement; and for the courteous, gentlemanly consideration, which has always marked his intercourse with them; also as a tribute of respect to the high intellectual qualities, which have raised him to the dignity he now enjoys.

In selecting inflammation as the subject of this paper, I have been governed, by the intrinsic importance of the disease, by the necessity of a proper appreciation of its nature and the varied character of its effects, and by the exceedingly interesting processes, which mark the various stages of its progress. Interesting and important, alike to the physician and the surgeon, a knowledge of its nature, symptoms, causes, and consequences, is indispensable to the intelligent application of the means for its prevention or removal. The extensive field of its operations, entering largely and often exclusively as it does, into the constitution of the great majority of diseases to which flesh is unfortunately heir; the frequently rapid, violent and destructive character of its career; and the lamentable changes it sometimes produces in the human frame, as well as the exquisite suffering to which it often gives rise, all render it a subject of special interest to one, like the physician, whose office it is to minister to the diseases of suffering humanity. Such being the gravity of its nature and the wide range of its influence, it is not surprising that its study and thorough investigation should have occupied the attention of numerous scientific & indefatigable medical observers, whenever the healing art has been practised & appreciated. The results of their observations, experiments & reasonings, have thrown so much light upon this previously obscure subject, that the phenomena accompanying the inflammatory process, are at the present time, probably

better understood, than those of any other morbid action to which the body is subject. In following their investigations, we have learned some peculiarly remarkable points, in connection with the disease. Of these, probably the most interesting is, the apparently anomalous fact, that the same cause is capable of exerting, at one time a conservative, at another a destructive influence upon the system or a portion of the system: that the agency, by which solutions of continuity in the body are repaired, is identical with that, by which under other circumstances, they are produced. This seeming paradox, is explained by the fact, that the difference between the two effects is merely in degree, a salutary effect being produced when the inflammation is carried to a certain extent, a morbid & destructive one, when that point has been passed. Thus can we remove the apparent inconsistency of regarding the inflammatory process, as, in some cases, a healing process, yet in those very cases, taking measures to defeat its occurrence. We apply our anti-phlogistic treatments, to prevent the extension of an action, which, suffered to proceed, might lead to disastrous consequences: confident, at the same time, that we cannot, by such treatments, prevent that degree of it, which is necessary to accomplish the reparative indications.

Having seen that this agent is powerful for good, as well as for evil, let us return to the more immediate effects before us. I consider it in its morbid aspect. — Perhaps it would be better, in tracing the course of this disease, to take the same

starting-point, from which they must have separated, when first commenced the investigation, viz. the symptoms

In inflammation, there are two sets of symptoms, the local & the general or constitutional, each evidencing its existence, by signs peculiar to itself. The local symptoms are generally the precursors of the general, & are marked, with more or less modification in different cases, by redness, swelling, heat & pain. These are the four prominent characteristics of local inflammation, which will be spoken of more in detail, hereafter. This local condition continuing & being sufficiently extensive, is found conjoined with the constitutional symptoms, indicating that the system generally, is sympathizes with & is affected by, the local disorder. The constitutional affection is manifested, first by the prodromic symptoms, such as, general feeling of mal-aise: languor: indisposition to exertion either mental or physical: sluggishness of the intellect: fulness about the head: vague, wandering pains: loss of appetite: torpor of the bowels &c. These continuing for a variable period; then set in, the more decided evidences of constitutional disturbance. The premonitory symptoms increase in violence & the patient is seized with a chill & the usual symptoms of depression; cold surface & extremities, weak pulse, pinched features, nausea &c. This state is soon followed by the occurrence of active febrile excitement. Skin hot & dry, eyes injected, face flushed, headache, nausea, constipation; pulse frequent, hard & tense, feeling like a chord under the fingers, generally full, though sometimes, as in serous inflammations, small but still hard, incompressible.

tongue moist & coated with white fur or coated in the middle with edges & tip red & dry: secretions generally, suspended or if present, scanty in quantity & altered in quality; respiration, hurried & labored, with breath hotter than natural; urine scanty & high colored, depositing considerable sediment. These are the symptoms, which, in a greater or less degree, mark the existence of that condition of system known as symptomatic fever.

This state of things, may either continue until the disease has progressed to some one of its destructive events, or it may subside with the gradual abatement of the symptoms.

Having now noticed the signs, by which this morbid condition may be recognized, we will proceed to a more minute examination into the seat & mode of origin of inflammation & trace the successive steps of its development.

The capillary system, being invariably the primary seat of inflammatory action, it becomes important, to inquire into the mode of formation, functions & action of that system, & here, we must call to our aid the researches of Physiology, without however, stopping to investigate the mode, in which its facts were ascertained. — Starting from the central organ of the circulation, the heart, we trace the currents of the blood through the arteries & veins, until we reach a point where the ultimate ramifications of the arterial system & the radical commencements of the veins, become so small, to be appreciated by the unaided eye. And here it is, that we meet with the capillary system, intermediate between the arteries on the one

heart & the veins on the other. It is composed of a net work of microscopic vessels, anastomosing & interlacing with each other, in every possible direction, & having this peculiarity, that they preserve the same calibre, throughout their whole course; thus differing from the diverging branches of the arteries gradually diminishing in size, & the formation, gradually enlarging branches of the veins, the arteries terminating and the veins commencing in the capillary system. This net work of extremely minute vessels, is distributed over the whole body, their calibre varying, from the 1/1000 to 1/4000 or even 1/5000 of an inch, the average diameter being from 1/3700 to 1/1850 of an inch, more minute than any other structure of the body, except the ultimate nerve & muscular fibres, which are, therefore not furnished with blood vessels ramifying within them, but have them closely distributed around their substance. In this system, are performed all the various functions of nutrition, secretion, excretion & calorification. The blood, during its passage through these vessels, has become changed from the bright, arterial scarlet, to the dark, bluish red of the venous current; has deposited that portion of its burden destined for the nutrition of the various organs & tissues; & has become loaded with the effete matters of the system, from which it is to be relieved by the influence of the atmosphere, in its transmission through the lungs. The capillary system then, is the ~~labor~~ laboratory of the animal economy, in which are carried on all the great processes of assimilation & excretion, necessary to its healthy existence. And being the seat of such important

operations, it becomes an interesting question, whether the capillaries exercise any peculiar controlling influence over the circulation through them. The peculiar controlling power of the capillaries, has been denied by many physiologists & as strenuously asserted by others, but, without entering into the elaborate arguments on the question, a few oft-observed phenomena may be mentioned, which can be accounted for, on no other hypothesis than that offered by the affirmative of the question. Thus, the ordinary ~~blush~~ phenomenon of the blushing, in which the capillaries of the face become congested, the post mortem continuance of some functions, as growth of hair, excretion of urine &c: the sudden & complete cessation of the circulation in a part the seat of spontaneous gangrene, and the effect of external impressions made upon a part.

Can all or any of these occurrences, be explained, except on the supposition of the existence of some power, resident in the capillary system, independent of that which regulates the general circulation? If the contractions of the heart tend, as they must, to an equable distribution of the blood, why is it, that there is this unequal flow, as shown in the sudden congestion of the minute vessels of the face, in blushing. If continuance of function is only co-existent with vital power & the circulation of the blood, why is it there this continuance of function, after general death, when the heart has ceased to act, & of course to propel the general circulation? These are questions which can only be answered, by supposing some independent power

in the capillaries, of regulating their own circulation. There are many other arguments which have been frequently adduced by the supporters of this theory, seem to prove conclusively their position.

Having given a condensed account of the capillary system & its functions, we come next to consider, the great vehicle for the transmission of the building materials of the economy, the blood, which is so intimately connected with the inflammatory process & whose changes during that process, afford so important a subject of investigation. The composition of the blood, has been found by repeated analysis, to consist of, in general terms, the red corpuscles & the liquor sanguinis. The red corpuscles comprise two portions, hæmatosin or coloring matter, & globulin or the substance of the corpuscle. The liquor sanguinis, contains fibrin, albumen, water, fatty & extractive matter & salts. The proportions, are generally given as follows: In a 1000 parts of blood

Hæmatosin, coloring matter.	2, 270	
Globulin or substance	125, 627	
Red corpuscles.		127, 897
Liquor sanguinis,		
Fibrin	2, 948	
Albumen	67, 804	
Water	790, 371	
Fat, salts & other matt.	10, 980	872, 103
		1000,000

Such is the average constitution of healthy blood. But these proportions may vary considerably, either above or below this average, without exceeding the bounds of health. Thus, the

red corpuscles, the average proportion of which is about 127 parts in the thousand, may rise as high as 140, or fall as low as 110, the maximum & minimum limits of the healthy range. The average proportion of fibrin is about 3 parts in the thousand, but in some cases, it has been known to rise to 3.5 or even 4, & sink to 2.5, still with the preservation of apparent health. The albumen also may vary in quantity, though its variation is not of so much importance as those above mentioned. Thus it will be seen, that in different individuals, under the influence of some idiosyncrasy, the proportions of the much important constituents of the blood may vary from the average; but there is in all cases, a maximum & a minimum point, beyond which they cannot pass without encroaching upon the confines of disease. Besides the constituents already mentioned, there is another which remains to be noticed, & that is the colorless or "lymph globules" as they are called. There is too, something remarkable about these colorless as compared with the red corpuscles. The red corpuscle, is a smooth, round, flattened body, elastic in character, with an average diameter of 1/3600 or 1/4000 of an inch, (thus corresponding in size to the capillary vessels) & holding their course along the centre of the circulating current. The "lymph globules" on the contrary, is spherical in shape, fewer in number than the red, many of them not smooth, but somewhat roughened on their surface & inelastic. They also differ from the others, as to their position in the current, moving more slowly than the others, & clinging

as it were, to the walls of the vessels. This constituent, we shall find hereafter to be of some importance, when considering the changes in the blood consequent upon the inflammatory action.

Having considered the two most important elements to be observed in connection with the phenomena of inflammation, viz. the capillaries, the necessary seat of the disease & the blood in which such important changes occur as its effects, we are now prepared to enter upon the examination of the phenomena of inflammation. We have already noticed the intimate relations existing between the capillaries & the blood circulating through them, as regards the mutual adaptation of their functions & the control exercised by one over the other, and we shall not be surprised to find, in what follows, the extensive play of these sympathetic relations, & how the change of condition from a modifying cause acting on one, produces corresponding modification of function or condition in the other. — The first effect, of an exciting cause applied to a part, is undoubtedly, an impression upon the nerves of the part. The intelligence of this impression being communicated to the nervous centre, evolves a return of additional nervous energy to the parts affected, thereby causing an additional supply of blood to the part, & thus the circulation is quickened. This increased afflux of blood, acts as a still farther stimulant, a larger quantity of blood is called, the circulation behind, must be necessarily accelerated, & in a short time the part becomes turgid from the abnormal amount of blood present, the capillary vessels being distended, without however any loss of their tone. From this

condition, if the irritant cause be slight & not continued, the part gradually recovers by the subsidence of the increased circulation relieving the diseased vessels. But the exciting cause remaining, still further changes take place; the capillaries, pent upon the stretch, by the large quantity of blood present in them, begin to lose their tone, permit the entrance of a still greater amount of blood, & the vessels in the neighborhood, beginning to partake of the excitement, hurry on their current towards the scene of action & thus add to the mischief. Effusion now takes place from the coats of the weakened vessels, consisting of serum or fibrin or of both. The effect of this effusion, is to relieve the congested capillaries, & if the course of the morbid action be here arrested, resolution is still possible, & is effected as before [illegible], by the gradual abatement of the symptoms. The character of the action in this second stage, is still that of excitement, though of more intense character, & as the functions of the part are not yet suspended, increased exudation takes place, which, on the subsidence of the disease, is rapidly absorbed. Here it is, that are first noticed, those changes in the blood afterwards more markedly developed in the third stage. The liquor sanguinis is increased in quantity, the increase being more perceptible in the fibrin, which, besides being augmented in quantity, has its quality also affected, its plasticity being greater. The "colorless globules are also altered, their quantity being increased, their tenacity greater than usual, causing a [illegible] to ~~ch~~ cohere

between them. The red corpuscles are relatively diminished in number, with increased adhesiveness, & having also a tendency to forsake their ordinary course in the circulating current. This state of things now is, cannot long continue. Either resolution must take place, or the disease passes on to its third stage or that of true inflammation. In this, the symptoms are all aggravated. The capillaries, having lost their tone & become over-distended, a larger quantity of blood is accumulated than in the previous stages, & forming a large tumor, with a central hardness from the effusion & concentration of the fibrin, & the circulation has become impeded & in some points altogether stagnant. This stagnation of the circulation proceeds from the following cause. We have seen that in the previous stages, the cohesiveness & quantity of the constituents of the blood are augmented. Owing to this exaggerated condition, the colorless corpuscles, whose current is naturally slower than that of the other portions, become still more sluggish. With this change in their number & predisposition to cohesion, they are acted on by the excited tide behind them, & finally forced into that portion of the capillary circulation, where the current is slower from the distension & loss of tone of the vessels; here, they are arrested, until cohesion takes place between some of them, & the nucleus once formed, the obstacle rapidly grows in size. Then the other constituents, whose tenacity also we have seen increased, collect around the primary points of arrestation. & thus finally, the circula-

tion is completely arrested. At the same time the velocity of the collateral circulation becomes greater & adds to the difficulty by forcing constantly a fresh supply of deteriorated blood against the impediment. The coats of the capillary vessels having lost entirely their tone, become stretched, softened & finally perhaps rupture, permitting the extravasation of blood in substance. The fibrin effused in large quantity, in large masses, incapable of contributing to the formation of any tissue, is aplastic, & proceeds to the formation of a lower type of organized matter, pus. Disintegration of texture is going on, & the products of the disorganization mingle with the other deposits. The function of absorption entirely suspended & that of nutrition perverted. Such is the state of inflammation.

Having traced with sufficient minuteness, the inflammatory process through all its successive stages, we are now prepared to examine the various symptoms previously mentioned. As the local signs are the first to attract attention, we will first consider them. As previously remarked, they are four in number, redness, heat, swelling, pain.

Redness. This is due entirely to the augmented quantity of blood in the part. As in certain parts of the body, there are capillaries which, in their normal state, are invisible to the naked eye, (the "rosa sirosa" of the old writers, so called from the erroneous idea that they carried only the serum of the blood) but become visibly red, when injected with blood, under the action of an irritant; so, in other parts of the capillary system which are visible to the unaffected eye, the color is deepened

in tone, from congestion of its vessels, under inflammatory action, & also from the higher color of the blood itself. To be of value as a sign of this pathological condition, the redness must be permanent, as the same sign may occur in other circumstances. It must also be confounded with other symptoms.

The tint varies, according to circumstances, being of a bright arterial red in acute cases: of a dark, purple, venous hue, in chronic, asthenic conditions: and of a yellowish tinge, when complicated with biliary derangements.

Heat, is one of the most constant concomitants of local inflammation. It is produced by the large amount of blood present, & that blood the seat of serious chemical & vital changes. The sensation of heat, experienced by the patient, is partly attributable, to the morbid sensibility of the nerves of the diseased parts, more keenly appreciating the rise of temperature.

Swelling. This is attributable entirely, to the effusion from the vessels, & is usually salutary in its tendency, but sometimes its effects are injurious. When occurring in an external part, where the loose extensible tissue, readily admits of its presence, without the infliction of injurious pressure on surrounding textures, the effusion is beneficial, by the relief it affords to the engorged vessels. But when it takes place, in internal organs, or in the vicinity of parts, whose functions would be impeded by its presence, as in the pericardium; or the pleura, its effects if the amount be great, may be very serious. Again, where this effusion is seated beneath the fibrous, unyielding texture of a fibrous expansion, its own injurious effects of pressure, is

added to the disorganizing tendency of the inflammation, the consequences may be more disastrous. Thus we see, that tendency of this condition, is beneficial or otherwise, according to its seat, amount, & nature or functions of the part in or near which it may be located.

Pain. This, though almost an universal, accompaniment of inflammation, is one however which is not unlikely to deceive, by reason of its existence under several other conditions than those we are now considering. The general characters of pain in inflammation, are these; slight at first, but steadily increasing with the advance of the ~~infla~~ disease: constant from the beginning, never ceasing until resolution occurs or the part dies: and invariably augmented by pressure. It proceeds from two causes. One is, the pressure exerted upon the nerves, by the tumefaction, & by the throbbings of the arteries, which, under their increased action, dilate & elongate, thus pressing upon the nervi vasorum. The other is, the morbid sensibility of the nerves themselves, which participate in the morbid condition of the surrounding parts. The amount & intensity of the pain, are influenced by the ~~sta~~ situation of the disease. When the tissues in which effusion happens, are yielding, less pressure is, of course, made upon the nerves, & consequently, less pain will be experienced, than under opposite conditions. Thus in periostitis, the pain is far more acute, than in inflammation of the loose, sub-cutaneous, cellular tissue. Pain is sometimes also sympathetic, occurring in a part, more or less distant

from the true seat of the disease; as pain at the orifice of the urethra, in inflammation of the kidneys: pain felt at the knee joint, in coxalgia: pain along the inside of the arm in pericarditis.

The inflammatory action continuing for a longer or shorter time, results in one of the following events. Resolution, Effusion, Hæmorrhage, Suppuration, ulceration, mortification, induration & softening. Of these, only two are properly the terminations of inflammation, viz. resolution & mortification, as it is only in these two cases, that the action ceases entirely. These events, will be mentioned in the usual order of their occurrence. The first & most desirable event, & that towards which our remedies are directed in the earlier periods of the disease, is Resolution. There is, fortunately, a natural tendency in the morbid action, to terminate in this mode. But it can only be accomplished, where there has been no considerable change in the texture or functions of the affected parts. If the exciting cause has not been too powerful in its impression, or the previous condition of the part, such as to render it peculiarly susceptible to the action of the morbific agents, & particularly if timely application has been made, of the proper remedies, we perceive the symptoms gradually abating & disappearing, & the part returning to its normal condition. The vascular excitement in the weighting tissues first subsides, & the immediate seat of the disease being thus relieved from the undue pressure, of the increased circulation behind, is slowly relieved from its congested state. The red & relaxed corpuscles at the point of

stagnation, begin to separate; second this cause, thus removing the obstacle to the circulation, which then slowly returns. Coincident with the disappearance of these conditions, the pain, heat & redness which were dependent on them, subside. The vessels, relieved from distension, again their tone, contract upon their contents & thus still further aid, to restore & equalize the circulation. Lastly, the function of absorption, comes again into play, & removes the effusion, more or less rapidly, according to its amount & character. The effusion disappearing, so also does the swelling. At the same time that these ~~chang~~ changes are going on locally, the constitutional symptoms also subside, & generally, with the occurrence of some critical discharge, as profuse diaphoresis, increased urinary secretion, copious evacuations from alimentary canal &c.

Resolution does not however, always take place in the gradual manner above detailed; but sometimes, disappears suddenly & completely, without passing through the various steps described. When the inflammation thus suddenly terminates in a pus, the process is called delitescence, & though, at first sight, it might seem to be a favorable circumstance, yet this always to be regarded with suspicion, as in such cases, another process is likely to occur, called metastasis, which may, or may not, prove serious, according to the circumstances. This metastasis, consists in the abrupt transfer of the disease from the pus originally its seat, to another & perhaps distant organ. Its gravity, will therefore depend, upon the relative

importance of the two organs is such, that when this interchange of conditions takes place. Thus, some internal structure being affected, morbid action may suddenly & completely subside in it, & a cutaneous eruption immediately supervene: a change, beneficial in its tendency, & one which we endeavour to imitate, in some of our therapeutical measures, as in the use of external irritants. Again, inflammation of the pleura, may be superseded by a similar action in the mamma of the female, or the testes in the male, a change which has no particularly evil tendency; but, if, with the same affection, a transfer to the brain should happen, & meningitis be lighted up, then, the case becomes very different & very serious. So also the tendency of rheumatism, to give rise to inflammation of the heart or its appendages, renders what, otherwise, would be a disease of no danger, one of great solicitude to the practitioner.

The main result of inflammation, is effusion. This consists of the exudation of serum, or fibrin, or of both, into the substance of the part affected. The first, serum, is the result of less intense action than that which produces the other product, fibrin. It is identical in composition, with the serum of the blood, & is undoubtedly that constituent of the blood, exuded through the vessels, modified in character; containing more albumen than natural, & being of greater specific gravity. The tendency of this effusion, as we saw, when speaking of swelling, is generally beneficial, or rather always beneficial in tendency, but sometimes injurious in effect.

This salutary effect, however, will depend very much upon the seat of the effusion & the nature & function of the part or organ in its neighbourhood. So may be thrown out upon the surface & thus be carried off with the bowels, and injurious consequences, as from the pressure of the alimentary canal, or from the pituitary membrane, causing hoarseness. The effects of effusion, having been sufficiently discussed under the head of dropsies, it is unnecessary to dwell upon them here. The serum, when poured out in a part from which it cannot readily escape, may be productive of great mischief, the degree varying, in the case of serous sacs, not only according to the amount, but also, according to the rapidity of the effusion. Take for example, the pleura. If, under the action of intense inflammation, a large quantity of fluid, should be suddenly poured into the pleural cavity, the consequences, would be far graver, than when the same, or even a larger amount, were effused more slowly. In the one case, the lung is taken by surprise, & its function impeded or entirely suspended, before it has had time, to accommodate itself to the change of circumstances; in the other, the necessary warning, is given to the endangered organ, & a compensatory effort is made, by the lung, both of the opposite & same side. Thus, we see, the effect of this product, is beneficial or injurious, according to its locality, extent & the rapidity of its accumulation.

With regard to the other products of effusion, fibrin, we

fibrin, that the same contingencies, are concerned in its results & also some others arising from the peculiarity of its properties. The characteristics of fibrin, are, spontaneous coagulability, & the capability of becoming organized, & converted into tissue, of the same nature as the tissue in which it is effused. When first deposited from the reports, in the active stage of inflammation, it is a soft semi-fluid, tenacious & transparent substance, which, while undergoing its natural changes, coagulates; separating, in a great degree from the accompanying serum, & forming a pellucid white film of adhesive substance, varying in form, according to its situation. It may occur, on the surface or under the surface. As, in the former case, on the margin of incised wounds, where it coagulates into films or detached masses, the serous portion trickling away; & in the latter case, as in abscess forming coagulated masses in the cellular tissue. In both instances, its effects are consolidation, in one, being the bond of union between the divided edges; in the other, throwing up a firm impediment to the further extension of the suppuration. Its presence becomes injurious, when situated so as to impede the exercise of function in an organ, as when bands of coagulated lymph, bind down lung to the vertebral column, compressing its structure & thus intercepting the access of air; or when, as in peritonitis, a loop of the organized fibrin, has surrounded a portion of intestine, constricting it & favoring the occurrence of ileus. These are changes, that take place in the plastic lymph, that is

where it is incapable of organization. But, under the influence of certain modifying causes, the fibrin becomes entirely incapable of undergoing its characteristic, natural transition & becomes opaque, as in the higher grades of inflammation, or it degenerates into the pus globule. Again, when there exists any general cachexy, the fibrin becomes exactly plastic, that is, only partially capable of fulfilling its purposes. Through all these changes, until complete organization has occurred, the fibrin is still amenable to the action of the absorbents, on the subsidence of inflammation. This organization, cannot however go on, so long as the inflammatory process is in progress, which from its nature, tends to the interruption of function & the destruction of tissue.

Of hemorrhage, the next event, very little need be said. In later stages, when the diseased action has proceeded to disintegration of tissue, & on that account, is an unfavorable symptom. It is not however, always dangerous in its indication. When it occurs in a situation, from which it can readily find exit, it is not to be rashly interfered with, as the tendency of hemorrhage in these cases, may be beneficial, by exerting a direct depletory effect on the inflamed vessels. But when in confined positions, then, like the other products of effusion, it may be very deleterious in its consequences. We come now, to the consideration of one of the most common & interesting events of inflammation, that is, suppuration, which consists in the production, of that

peculiar fluid, recognized as pus. "Pus, is a thick, creamy opaque fluid, containing no floccules, matter: having no granules, cheesy deposits: soft, unctuous to the touch: having an alkaline reaction: & a manifest animal odor, when warm, which is less when cold; & being of greater specific gravity than water." It is a regularly organized product, formed from the liquor sanguinis effused during the inflammatory process, according to the grand law of cell developments, which governs the formation & growth of all the tissues & fluids of the body. By analysis, it has been found to consist of two portions, solid & fluid, identical, with the serum & fibrin of the blood. The nucleus & walls of fibrin, comprising the solid portion, the globules, & the serum constituting the fluid portion, or liquor puris, in which the globules are seen floating. The liquor sanguinis, is then the basis, from which the purulent matter is elaborated, by regular developments, & not by the disorganization or putrefaction of the tissues. The liquor sanguinis, which, in its normal condition, has a tendency to the formation of higher types of organized matter, under the influence of morbid action, carried beyond a certain point, degenerates & forms the lower organized product pus. This pus, once formed, has the power, of sustaining the pus-producing process, & thus is the formation of pus maintained, after the action which first gave the start to its production, has ceased. This is exemplified, in the surface of a healthy ulcer, where there is a copious secretion, without, of pus, without any co-existent

inflammation. Situated beneath the surface, pus may be either circumscribed, or diffused. In the former case, it is limited by the barrier of coagulable lymph, a previous product, which concreting effusion, forms a strong & generally effectual impediment to its diffusion; & when the purulent matter is thus limited, its direction is always to the surface, through the opposing tissues. This advance towards the surface, is accomplished by ulceration, the presence of the pus, causing molecular disintegration of the textures, & thus opening for itself a passage. But its progress in that direction, may be arrested in two ways; either by the mere existence, of the limiting barrier of lymph, or by the interposition of textures, unyielding in character, & too little prone to ulceration to permit the transit of the purulent collection. The absence of the coagulated lymph, may proceed, from some peculiarity of the inflammation itself, as in phlegmonous erysipelas, in which, the fibrinous exudation takes place, but so altered in its nature, as to have become incapable of coagulation. This may be caused by the intensity of the inflammation, its various stages, up to suppuration, being completed so rapidly, that the fibrine thrown out, has not had time to take on its partial organisation, before it is broken down into purulent matter. In this case, the pus, meeting with no opposition to its diffusion, penetrates into the areolar tissue of the neighbouring parts, & becomes productive of serious consequences, unless arrested by incisions. It may also, as mentioned above, be prevented from reaching the

surface, by coming in contact with some unyielding structure, as the serous or fibrous membranes, which offer effectual resistance to its further progress in that direction. The pus being thus checked, the accumulation going on by the conversion of the fibrin into pus, the barrier of lymph is finally destroyed, & in this manner also, the diffusion of pus occurs into the surrounding cellular tissues, producing the same effects, as when not limited in the first instance. Thus, we see that the local consequences of this accumulation, are dependant on its situation, & the various circumstances connected with its production.

Inflammation then, is essential to the first evolution of pus, but, as we have seen to be so, not formed, the inflammation action is no longer necessary, for its continued reproduction. This reproductive power of pus, is a salutary provision in some instances, as on the surface of an open wound, where the tender granulations require some protecting medium, to shield them from the injurious action of the atmosphere; & here this bland, uninitiating liquid is being constantly formed, from the liquor sanguinis effused upon its surface. Besides the local consequences of this suppuration, above detailed, there is a corresponding change, which occurs in the constitutional symptoms, if the suppurative process has been sufficiently extensive or has involved any important tissues. In that case, we notice the advent of hectic fever, which is preceded, as in the inception of inflammation, by rigor. This rigor, is followed by the symptoms of febrile action, hot skin, the peculiar circumscribed blush upon the cheek, which has received the characteristic appellation of the "hectic blush".

pulse small, rapid, sometimes hard; tongue, dry & glazed; burning sensation in the palms of the hands & soles of the feet; & this fever finally passing off with profuse perspiration. The fever is remittent in character, the exacerbation occurring twice a day, noon & evening, preceded by slight rigors. Emaciation proceeds, though the appetite may not be impaired; respiration becomes short & hurried; bowels, at first constipated, profuse diarrhea coming on subsequently, if progress of the fever be not checked: strength rapidly diminishes; sleep is disturbed, unrefreshing; urine varying, sometimes scanty & high colored, more frequently copious & pale; while the mind remains clear & intelligent, despite the rapid failure of the physical powers. Such is the type of hectic fever, varying in different cases, according to the extent of the suppurative process.

This hectic condition, was for some time, supposed to depend upon the absorption of pus into the circulation. But this cannot take place, as will be evident from a moment's consideration. The pus globule, has been ascertained, by microscopic investigation, to have an average diameter of the 1/2000 of an inch, which is larger than the blood corpuscles. Now, as the blood cannot escape in substance, through the unruptured coats of the capillaries & veins, so the pus globules, being of greater dimensions than the blood disc, cannot of course, be absorbed by the coats of those vessels & conveyed into the circulation. Moreover, it is not necessary to resort to the hypothesis of purulent absorption, in order to explain the occurrence of hectic fever; since it can be more satisfactorily accounted for, by

by the constant drain upon the system, which is going on during the progress of suppuration. The liquor sanguinis, the nutritive material of the blood, which should have been appropriated for the purposes of nutrition, is so altered as to lose its formative & nutritive properties, & becomes converted into a product entirely inapplicable to the purposes of assimilation. The system, being thus deprived of the compensatory process, by which the natural elimination of useless textures is replaced, necessarily sets the stamp, & presents the symptoms of hectic fever. Pus, may however, be mingled with the circulation, through not by absorption. In erysipelatous phlebitis, for example, where pus is formed inside of the vein walls & has no limiting fibrinous barrier, it must of course, be carried along with the current of the blood. In this way, pus may exert a direct deleterious influence on the system, causing metastatic abscesses to start up suddenly in different parts, more frequently the lungs, & thus give rise to the hectic symptoms.

Such is suppuration: a process entirely different from those we have previously been considering & which might be treated of much more in extenso, did the limits of this essay permit. From this, we now pass to another process, perhaps equally interesting & playing a very important in the course of inflammation, viz. <u>ulceration</u>. By this term, is meant the molecular disintegration of tissues, its death taking place particle by particle, thus distinguished from the death en masse, which is the result of mortification. Ulceration is the consequence of a still more advanced degree of action, than that which we

found to be necessary for the elaboration of pus & resembling that produced only in originating from the same cause. Unlike suppuration, ulceration can only proceed during the persistence of inflammation, & its decline goes on pari passu with the subsidence of the inflammation. It then owes no origin but inflammation, & can only be co-existent with it. The rapidity of the process is in direct relation with the intensity of the morbid action & the vital power of resistance possessed by the parts affected; & thus we have all the different varieties of ulcers, as the simple, the acute, the irritable, the scrofulous, (modified by the constitutional strumous taint), the inflamed, the phagedenic, all differing, only in the amounts & intensity of inflammation. Ulceration may occur, either on a free surface, or beneath the surface, as in an abscess, where it is the means by which the purulent matter opens its way to the surface. All the tissues of the body are liable to its invasion, though there is a great diversity in the promptness to it, exhibited by different textures. Thus, the mucous, areolar, tegumentary & parenchymatous structures generally, are remarkably prone to be affected, while the serous, fibrous, nervous & vascular (blood-vessels) will, for a long period, resist its action. We may often find, bones, tendons, nerves & bloodvessels, exposed by ulceration, which has destroyed all the parts around them, but left them, as yet, intact. Abscesses with concomitant ulceration, may exist under an aponeurotic expansion, & perhaps destroy all the textures in the vicinity, before the fibrous tissues will yield, as we see in paronychia. This comparative immunity enjoyed by some tissues, is sometimes beneficial,

sometimes the cause. The power of resistance possessed by the nerves & blood-vessels, is evidently conservative, as also the same property of fibrous texture, when it prevents the extension of the disease to important parts. But, when the ulceration takes place beneath a fibrous expansion & its passage to the surface thus prevented, the consequences may be disastrous, as was fully noticed, when speaking of opacities. There is but one case, in which this destructive action of ulceration may be called salutary, & that is, when it occurs for the purpose of separating dead from living tissues, as in mortification; where the mortified part is thrown off by the agency of ulceration.

Mortification, one of the two proper terminations of inflammation, consists of the death of a part in mass, not gradually, molecule by molecule, as in ulceration, but suddenly, completely, & in considerable portions. The affected part is no longer obedient to the control of the vital powers, but becomes subject to the operation of chemical laws & forces which speedily reduce it to a state of putrefaction. Inflammatory action, has here reached its acme & can go no further. Up to this point, we have seen ~~that~~ it capable of progressing, step by step, from one process to another, each successive one more destructive & farther removed from the healthy condition than the last: but here, it has done its work, & can accomplish no more; the part passes from under its influence, to the control of forces as powerful & destructive as itself, though operating in a different manner. — Mortification, is the generic term used to ~~case~~ comprise the meaning conveyed by the expressions, gangrene & sphacelus: the former ~~being~~ signifying the

approach is preceded of death & the latter, its actual commencement. At the approach of mortification, the symptoms undergo some modification. Circulation having ceased in the part, the redness subsides, leaving a livid hue behind; swelling decreases, from cessation of effusion; temperature diminishes, pain & heat disappear. The part, previously exquisitely sensitive, can now be handled, even roughly handled, without inflicting suffering. Decomposition rapidly takes place, from the abundance of putrefactive material, & the cadaverous odor is perceived. The surface becomes covered with blisters, vesicles filled with pale serum, which on pressure, readily ~~papers~~ pass from point to point beneath the scarf skin, thus distinguished from vesicles arising from other causes. The margin of the gangrenous portion, is abrupt, if the mortification is not extend, but if the action is to progress, the hue of the sound & diseased parts are blended, & dark lines are seen running up the limb. When sphacelus has occurred, the part becomes completely cold, feels soft & boggy, crepitates under pressure, owing to the presence of the gaseous products of putrefaction; the odor very offensive; the color, black when exposed to the air, but almost natural when protected from the atmosphere.

The mortified mass being now a useless, injurious burden upon the system, nature immediately sets about accomplishing its removal. Inflammation is lighted up in the sound tissues immediately adjoining the dead; this speedily passes into ulceration, which gradually progresses downwards, undermining the mass, & forming a line of separation between the two. The inflammation preceding the ulceration, leaves up by its fibrous

effusion, the mouths of the vessels to be exposed by the powerful circulation & thus prevent hemorrhage. When the line of demarcation has been completed around the dead matter, it is then thrown off from the sound parts, leaving the ulcerated surface, in which inflammation rapidly subsides, leaving a healthy granulating ulcer, which then proceeds to perfect cicatrization. Intensity occurs on the surface, is easily detected by the symptoms already detailed; but when it exists in a part shut out from view, also only be appreciated by the constitutional symptoms by which it gives rise. When however, lesions communicating with the external air, are the seat of gangrene, its presence may be recognized by the characteristic odor. From the intensely & totally disorganizing nature of the injury inflicted, it is not surprising, that the system should manifest its consciousness of the evil, by the development of very marked symptoms. All these are principally, evidences of nervous shock, & depression, & in describing them, I could not do better than quote the words of Mr. Travers in his work on inflammation.

"The pulse is increased in frequency & diminished in diameter & force; in many cases irregular, & in some intermittent. A peculiar anxiety & expression appears in the physiognomy, & a remarkable tint overspreads the face, the features of which, the nose & lips especially, are contracted & pinched. The anxiety is soon exchanged for a lethargic expression, as if the patient were under the influence of alcohol or opium; involuntary movements & tremors affect the hands & fingers, & frequent sighings are observed, which are broken by an occasional hiccup.

The inclination for food fails totally, the surface of the tongue is coated with a brown fur, breath & dry, leaving the edges of lips free, but without moisture. As the case advances, the entire tongue, fauces & lips, become dry to incrustation, so as to require constant moistening; but with small quantities of fluid for swallowing is slow & attended with difficulty. The skin, which in the moist was dry, opens to a copious & clammy perspiration over the whole surface. In parts sensibly with its temperature, & feels cold as well as damp. The mind, as first irritable — then, after the total subsidence of pain, stupid, wavers & becomes subject to illusions, chiefly of a passing & transient kind; expressed by half sentences, with a thick & broken articulation, & accompanied with startings & momentary efforts of insane excitement. In traumatic gangrene — the age & constitution being previously in full vigor — this slow delirium is exchanged for fits of active & wild frenzy, accompanied with loud cries & violent efforts, requiring a powerful & continual restraint; & this continues, with occasional intervals from exhaustion, for hours together; & subsides, often suddenly, in prolonged coma & apoplectic death." When the mortification has been preceded by no strenuous excitements, the delirium, continues of the passive kind, the optic nerve, & reactions take place involuntarily. The patients fumble with & pick at the bed-clothes. "More & more marked are the death-like coldness, the clammy sweats, the small, indistinct & fluctuating pulse, & the cadaverous expression. In this state a patient will sometimes lie totally insensible & unable to articulate or

smaller; for eighteen or twenty four hours, & die without a groan or struggle."

Such are the principal results of inflammation. There remain two others to be mentioned, viz. — ion & suppuration; but as they are, each of such immediate consequence as the other events, it will not be necessary to extend the limits of this essay.

Inflammation, may extend in one of three ways, by continuity, by contiguity, or by remote action. The first mode, is that by which it spreads through a continuity of texture, from one part to another of the same tissue, as on the skin in erysipelas, & also the extension of inflammation from the mucous membrane of the mouth, fauces, to the oesophagus, larynx, trachea & bronchia. Extension by contiguity, is effected by a transfer of the disease from one part to another with which it is in juxta-position, there being no continuity of the same texture between them. Generally, the more loose & permeable the intervening tissue, the more rapidly is the extension effected. This is the more likely also to be the mode of propagation, when the inflammation has reached its acme quickly, before it has been circumscribed by the lymph barrier.

Remote extension, may be produced, either through the blood, by the lymphatics, or by a nervous agency. In the first mode, the blood, becoming changed during its passage through the seat of disease, circulates to other parts, & thus, by the excess of stimulus it carries, may prove the exciting cause of unusual muscular action elsewhere. The lymphatics also, may

be the means by which the diseased action spreads. When a part inoculated, the virulent fluid taken up by the vessels carries it to other parts of the system, there to act as the cause of morbid action by nervous agency, that is, sympathy of function must cause the inflammation to extend or change its seat, as in metastasis.

We come now to that branch of our subject, which must be the first question presented to the mind of the practitioner, after his diagnosis has been established, that is, the treatment. In laying down rules for the management of any disease, particularly one, like inflammation, subject to so many varieties, it is of course to be remembered, that they are but general in their application, & are to be varied according to the modifying circumstances present in each individual case. In two cases of any disease, are precisely alike either in their symptoms or cause; how much more reason have we not then, to expect variations in a disease of the character of that one under consideration, which forms so large a proportion of the ills that afflict mankind.

It is then of the first importance to the practitioner, to appreciate & be governed by, the peculiarities of each case, as well as to understand perfectly the general principles of treatment, approved by reason & experience.

The principal & most efficient means at our command, for the treatment of inflammations generally, are, blood-letting general or local, mercury, antimony, opium, counter-irritants; of each of which we shall speak separately

Blood letting. This is par-eminently the remedy in inflammations generally, the most powerful, the most efficient within our reach; & to this, all other remedies are in secondary strength. In some forms of the disease, & under peculiar circumstances, we may succeed without its assistance, yet, in open, frank, sthenic inflammation, when employed opportunely, there is no remedy known to the Materia Medica which can compare with it, in point of speedy, complete efficacy. And this we would be naturally led to expect, from the nature of the disease & the known effects of the remedy. When we consider the character of the morbid action in progress: that, after its ~~extension~~ inception, the blood is the agent most actively employed in its extension & most largely affected by it: that the blood, by its presence in abnormal quantity, tends to sustain & extend the morbid action: that the very changes effected in it, aggravate the mischief: that in this changed condition, it is circulated through the whole system, carrying in its currents the germs from which, under slight exciting causes, diseased action, may be set up elsewhere; when we reflect upon these considerations, we see the great importance, nay, absolute necessity of affecting in some manner, an alteration in the character or course of this active agent. Blood-letting however, is a remedy perverted for good or for evil, & though capable of exerting as an efficient check upon the disease, yet equally capable of producing bad consequences, when injudiciously employed.

Its effects upon the system are of two kinds, sedative &

remedie. By abstracting suddenly a certain quantity of blood from the circulation, a direct sedative influence is exerted upon the heart & great vessels which immediately feel the deficiency in the supply of their natural stimulus. This state of relaxation causes a corresponding diminution in frequency & force of the heart's action, and is also felt by the whole system, partly from the natural tendency so constantly exhibited in the economy, to sympathize with the altered condition of any important organ, partly, from diminished activity of function, produced by the diminished supply of the necessary stimulus. Its revulsive action also, has an important bearing upon the disease, & it is one we are constantly making use of, in our therapeutical applications. It consists literally, in drawing the disease, as it were, from its original seat, to one less dangerous & more accessible to our remedies. By blood-letting, the blood is invited & induced to forsake its primary seat, & rush to the new points of irritation intentionally produced. Thus are the capillaries of the inflamed part relieved, perhaps only partially of the rumora of blood, & time is allowed them, it may be, to regain their tone, before the return of the blood. But even if the effect be only temporary, & they have not resumed entirely their normal tone, still, the partial relief has been sufficient, to enable them to bear the returning current better than before. A change is also effected in the constituents of the blood itself. The red corpuscles & the fibrin are both diminished, the former being undergoing

greater relative diminution for the earlier. The effect of the abstraction of the blood is serious. Such being the known consequences of general blood-letting, we have reason to expect powerful assistance from its timely & judicious employment. To produce its full effect however, it must be used at the proper time & in the proper manner. If resorted to only in the worst of the disease, no full bleeding, rapidly drawn, will often be sufficient of itself, to check its progress. As a general rule, the earlier its application is made, the more efficacious will its prove, & the less probability will there be of the necessity for its repetition. Supposing it then to be indicated, the patient should be placed in the semi-erect position, & a large orifice made, the blood being allowed to flow pleno rivo: the object being, to produce as great a sedative effect as possible, with as little expenditure of the nutritive fluid. For it is always to be borne in mind in abstracting blood, that the time may come, when the vital powers will be depressed, as to require all the support we are able to afford, & we can give nothing that will be so serviceable as the blood, that our proper nourishment. It is very rarely necessary to carry depletion to full syncope, ad, cæteris paribus, the reaction will be in proportion to the previous depression, & if restoration from syncope occur, the reaction may be so violent, as to defeat our object & place the disease beyond control. Therefore, the flow is to be arrested when syncope is approaching, which will be evidenced by the feeling of faintness, dizziness, pallor of surface, flagging of pulse &c. The reaction which occurs may be one of two kinds, which

it is important to distinguish, as they require different treatment. The first will be marked by frequent, quick, irritable, but not hard pulse, headache, oppressed breathing, tremulous anxiety & in a word the general evidences of nervous excitement. Here, we find the nervous element predominant; the condition is one of nervous irritability from deficient supply of the natural stimulus to the brain, produced by loss of blood, & if unfortunately the symptoms should be misunderstood, & further depletion be employed, the evident effect would be, a great aggravation of the symptoms. This state of things may generally be relieved, by the administration of a few ounces. The other kind of reaction, is the actual occurrence of the inflammatory symptoms. Frequent, hard, thrilling pulse, flushed face, hot, dry skin, & the other signs of active febrile excitement, which call loudly for a repitition of the bleeding. After depletion has been carried sufficiently far, ~~in the second reaction~~, it may be proper, in some cases, to administer a full sedative dose of opium, to prevent the subsequent reaction; but this agent, opium, is to be used with caution, on account of its tendency to lock up the secretions. More quantity of blood, should constitute no ~~measure of its employment~~ indication of the extent to which the remedy should be carried, its effect is the important consideration. Blood should be allowed to flow, until some sensible impression is made on the system or on the disease. And here, we should carefully guard against being deceived as to the effect, by the sudden & transitory syncope which sometimes occurs in nervous individuals

after the loss of a few ounces, & before any impression has been produced. Here it may be as well to remark that the quantity which can be drawn, or the tolerance, will generally be in proportion to the intensity of the inflammation; it being a general rule, that in proportion as the system stands in need of a remedy, in the same proportion will tolerance be established for that remedy. If the disease has passed its earlier stages, bloodletting may still be of benefit, though not so decided in its effects. Of the propriety of its use here, we are to judge by the symptoms & general condition of the patient. In the latter periods, when the depressing effects of the disease begin to be manifested upon the system, depletion as a general rule is contra-indicated. The disease has passed the period in which benefit is to be expected from its use, & changes are produced, which depress the system & threaten to suspend life by the exhaustion of the vital powers. Then, recourse is to be had to supporting measures, as tonics stimulants &c.

We may then sum up as follows, the circumstances by which we are to be guided in the application of this remedial agent. The violence of the disease & its situation as regards the importance of the organs or texture implicated: the complications that may co-exist: the period of the disease & with regard to repetition, its effects on the disease: age, sex, temperaments, previous habits & mode of life, present condition of the system as concerns strength or debility: the probable issue of the disease. These are the most important circumstances to be considered, in connexion with the question of the use &

extent of blood letting. With regard to local bleeding, much more need be said. When the inflammation is too slight to require general depletion; or when general depletion has been practised & it is not considered expedient to repeat it; or when, though general bleeding be indicated by the severity of inflammation, there are yet strong contra-indications, in these cases it is principally, that the local abstraction of blood may be employed. And when used, it is better as a general rule, to draw from the vicinity of, instead of immediately from, the inflamed part.

The next great antiphlogistic agent, is Mercury, in some cases holding the second rank to blood-letting, in others, yielding the palm to another great remedy, antimony.

Mercury is given in inflammations, to answer three indications, sorbefaction, defibrinization of the blood, & secretory stimulation. These invaluable properties it possesses, render it well worthy the high & extended reputation it now enjoys as an antiphlogistic. We have seen that effusion is one of the invariable results of the inflammatory process. & the rapidity, extent & nature of this effusion, are often such as to render it dangerous, & always such as to make its removal highly important. Here then, mercury enters as a powerful agent. By its alterative effect on the system, it changes the nature of the diseased action: promotes the absorption of the effused matters, after the intensity of the inflammation has been subdued: by its defibrinizing influence on the blood, (diminishing also the red corpuscles) it deprives it of the same of the materials

from which the effusion is formed, thus preventing a further deposition; by its tonic, stimulant action on the capillaries, it facilitates their restoration to the normal state; at the same time it increases the functions of the various secreting organs and excreting organs, thus tending to a resolutory or absorbent effect, through the various emunctories. In these few words are concisely expressed the action of mercury as an antiphlogistic. It is administered after blood-letting, as a secondary means, not to be depended on solely. The usual form of its administration with a view to its constitutional action, is in divided doses, combined with opium to prevent its passing off by the bowels, and it is pushed until its characteristic effects are produced in the system, evinced by the peculiar fœtor of the breath, & tenderness of the gums. Farther than this, it is unnecessary even injurious, to push it, except in some very rare cases, as they but adds a new source of irritation to those previously existing. But, valuable as this substance undoubtedly is, there are circumstances in which its use would be improper, as, where the strumous diathesis is known to exist; the presence of anæmia; idiosyncracies, rendering the individual peculiarly susceptible of the mercurial influence. Even in these cases however, where the emergency is pressing, & the indications could not be met with any other means, we should not hesitate to use it, in accordance with the great rule, that where the danger of the disease, exceeds the danger of the remedy, use the remedy. Mercury seems also to exert a greater control over some structures than over others,

as in cases of inflammation of membranous structures, where its control seems greater than in parenchymatous affections.

Antimony is the most great antiphlogistic, & forms one of the most valuable remedies known to medicine, for the treatment of inflammations. It exerts a powerful sedative influence over the vascular system, and may sometimes be used as a substitute for blood-letting, where that is inadmissible, or the affection slight. It diminishes the action of the heart & arteries, produces a general depressing effect on the system & causes diaphoresis, thus obviating one of the tendencies of inflammation. Its use is most strongly indicated in the early stages, before effusion has taken place, & where there is intense vascular excitement. After the period of fibrinous effusion, more reliance is to be placed on Mercury though they are often combined together. Small quantities of opium are usually added to the antimony to lessen its irritant effect, which is one of the objections to its use.

Purgatives also, constitute one of the means employed in this class of diseases, & in some cases are of great importance. They are useful in the early stages of almost all inflammations, by clearing the intestinal canal of any irritating substances that might be present. They have also ~~considerable~~ a powerful derivative action, which renders them very serviceable in affections of the head, where great relief is often afforded by the copious mucous discharges produced by certain of this ~~class~~ class of remedies

Their use is contra indicated by irritated & inflammatory conditions of the alimentary canal, on account of their action as local irritants, & the determination of blood they cause to the intestinal vessels. Such in all inflammations, the importance of keeping the bowels open, should be constantly borne in mind, as the presence of accumulations there, cannot but exert an injurious influence on the system at large.

Emetics, in the inception of the disease, are sometimes useful by emptying the stomach, promoting secretion & also, by the strong impression made upon the system, sometimes cutting short or aborting the attack. Determination of blood to the brain would of course, constitute a contra indication in their employment, inasmuch as the constant tendency of emesis is to cause congestion of the cerebral vessels.

Among the adjuvant means in the management of this disease, are counter-irritants & diuretics, which are better adapted for the condition of effusion. The former are to be regulated in their employment, by the period, not being admissable during the active stages, on account of the general excitement they occasion, but frequently forming a very important part of the treatment, after active excitement has been subdued, & there remain but the products of inflammation to deal with.

Another & not by any means, the least efficacious of the therapeutic measures, is the regimen. The diet of the patient is to be carefully attended to. Fortunately, in the acute periods of the attack, the appetite of the patient is such as to require but little check, anorexia being one of the marked symptoms of

febrile disorder. It is during convalescence, when the appetite has been urgent, sometimes ravenous, without a corresponding strength of the digestive organs, that the strictest attention on the part of the physician is imperatively demanded. In the debilitated state of the digestive apparatus, any inordinate supply of ingesta, may & will cause irritation of the stomach or intestinal canal, & the system sympathizing with this condition, a relapse into the former diseased condition may readily occur. Both the quantity & quality of the aliments therefore, should be carefully regulated, at first only the blandest & less stimulating kinds being allowed, & the quantity increased as the organs regain their strength.

Rest, both of mind & body, is another circumstance that should engage the care of the physician, excitement of mind or exertion of body having an unfavorable reaction upon the disease. Repose should be strictly enjoined, with the removal of all causes that might tend to disturb, depress or excite the mind. The patient should be surrounded by all the soothing influences that can be commanded, exciting conversation should be avoided & the presence of many persons at a time should also be prohibited. In a word, every thing should be removed, that might disturb in any degree the mental or bodily tranquility of the patient, & for a very obvious reason pure air should be supplied. By the application of the rules here given, the practitioner, if he does not become wearied of his case, as I am of this thesis, will much probably effect a cure.

A

Clinical Report

of

Six cases of disease

Submitted to the examination

of the

Provost, Regents and Faculty

of Physic

of the

University of Maryland

for the degree of

Doctor of Medicine

by

William Jackson Wroth

of

Maryland

1852

Gentlemen,

I submit for your examination the following report of six cases, observed by Myself, in the Baltimore Infirmary during the year 1851, being a student in this Hospital by your permission during the said year.

The first is a case of Hemiplegia treated successfully by Prof.r Geo. W. Miltenberger.

Wm. Labor, aged 19 years, was admitted to the Baltimore Infirmary June 9th 1851. Blacksmith by trade. In December last he was struck on the top of his head by a pitcher in the hand of an intoxicated person. A wound about 3 inches long was inflicted a little to the right side of the median

When admitted, there was perfect paralysis of the left upper extremity, left side of the face, tongue and partial paralysis of the left leg. From the day of his admission to the day of operation he had a slight convulsion every twenty four hours. It commenced with a sense of constriction in the left temple and over the left eye, the face became turned to that side over the shoulder; and thence it extended until it became general. The pressure of a hand, moistened with cold water, over the affected temple ~~will~~ invariably arrested the attack. His Medical attendants did every thing in their power, but without any good effect. As a last resource however they in consultation determined that their only hope was in trephining. He was then removed to the Baltimore Infirmary.

June 10th. General health good – Bowels rather torpid. tongue rather slightly coated. Ordered as preparatory Hydrargyri: Mass: grv to be given to-night, and repeated on the following night. and the second dose followed by a cathartic. To be kept on low diet.

June 14th. Was trephined by Prof. Geo. W. Dillinberger over the depressed portion of the bone, almost directly over the longitudinal sinus. A button of bone about the size of an American 25 cent piece was removed. The operation was very well borne. There was no perceptible variation in his pulse. Some difficulty was anticipated from the fact that the button was taken from that portion of the cranium directly over the longitudinal sinus – but the dura mater was not even scratched. The piece of bone was then removed, leaving the

edges almost smooth. Ordered - Cold water dressings to the head. Mr Jn. was not willing to administer Chloroform to Mr Sarbor during the operation. also ordered the following

℞ Magnesiae: Sulph ℥j
Antimonii: et: Potassae Tart gr ¼
Aquae pura ℥ j
Mosc Solut. S. Give at once.

June 15th. He is quite comfortable this morning - irritation from the wound slight - pulse natural - tongue cleaned. He slept well during the night, and had three free operations from his bowels after taking the saline mixture yesterday afternoon. He has had no symptom of convulsions since the operation. Seems to be in good spirits and feels decidedly better. He does not now complain of that unnatural sensation in his head, face and neck which

troubled him almost from the time of the injury to the time of the operation. He even felt pain as far down as the shoulder. He complains of some cough. Ordered the following

℞ Mass: Hydrarg gr v
Extr: Hyoscyami gr i
Pulv: Ipecac grs
M & ft pill. S. Give at once. Keep him on a low diet, and continue the water dressings to his head.

June 16th. Slept well during the night. Cough much better – pulse soft and natural – is in a perspiration tongue clean. He thinks he has more power on the paralysed side of the body – feels that he is improving.

June 17th. The wound was this morning dressed by Dr Dr. who found that it had partly united by first intention – the portion which had not thus

united presented reaction granulations.
Slept well during the night. The only
inconvenience was from the cough,
which still continues. Ordered the following

℞ G. Acaciæ ozß
Sodæ: Bicarb ℥ij
Vin: Ipecac
Tinct: Hyoscyam: aa: fl℥ss
Aqua pure fl℥ij

} Mixt Emuls
S. Tablespoonful every
three or four hours.

June 18th. After eating his breakfast
this morning he was taken with sickness
at his stomach and had slight shiver-
ings followed by increased heat of the
surface of the body. He found that
the gland behind his right ear a-
long the jutting portion of the temporal
bone was painfully enlarged. He did
not complain of any unpleasant
feeling about the wound. Has no fever.
His bowels have not been moved
for 36 hours. Ordered. Apply Solution

over the inflamed gland. Give him ℥ss of Magnesiæ: Sulph: at once, and let him take only half a dose of the Mixture for Cough.
June 19th. He is quite feverish this morning - pain over the side of the face from the inflamed gland - increased pulse 90 and firm - bowels have not been moved for 60 hours - tongue coated - Cough troublesome - some pain in the head with great disposition to sleep - Ordered the following
℞ Magnesiæ: Sulph ℥j
Antim: et: Potass: Tart grs iv Mix with ℥iv of Water and give at once. If it have no effect in two hours, give an Enema consisting of,
Sodæ: Muriat:
Syrup: Empyromat: a: a: tablespoonful
Aquæ fervent ℥iv mort Enema.
If the pulse be not reduced by the action of the above - take blood from the arm till its loss is indicated by the pulse.

He was suffering this morning with not so great thirst and some nausea – had also a slight spasm. Does not appear so comfortable.

June 20th. Yesterday afternoon his pulse had risen to 112 and still firm. There was some abatement of febrile excitement – bowels were freely moved; still not much change in the pulse. He was bled as was ordered – twelve ounces were taken. This morning his pulse is softer and not so frequent. Erysipelas made its appearance over the brow and on the forehead extending down to the temples on either side. Tongue still coated – bowels well moved – slight tendency to sleep – pulse 86 and not so firm as yesterday. The wound is found to be open still, along the antero-posterior incision – Complains of feeling very unwell. Ordered. Circumscribe the inflamation with a solution

the Nitrate of silver ℈ to the ℥i of water, also cover the part with Collodion. Let him have sage tea to drink during the day. also ℞ Iodo: et Potass Iod: ℈i

Vin: Rad: Colchici ℥ij

Aquæ Puræ ℥iss

Misce Solut. S. Give tablespoonful every four hours.

June 21st. He is better to-day. Mind is clear – pulse 80 and compressible – tongue cleaner – bowels moved tolerably well. The Erysipelas has spread downwards over the face, neck and around the ears. No change apparent in the wound. Treatment ordered to be continued.

June 22nd. The Erysipelatous inflamation has spread still farther. Complains of great debility. Ordered. Renew the application of the Collodion over the inflamed part. Paint his eyelids, neck and ears with tincture of Iodine. Continue

the solution of Rochelle salts and colchicum, and if his bowels are not freely moved by 2 O'clock P.M. give an enema of Salt and Molasses, as formerly prescribed. His bowels were well moved during the course of the afternoon and consequently there was no need of the enema.

June 23rd. He is rather better this morning - not so much febrile excitement. The erysipatous inflamation has somewhat subsided. Ordered. Apply the tinct. of Iodine three times a day, and let him have for his dinner some cold chicken broth strained, and some ice cream. In the afternoon, if necessary, administer a purgative enema.

June 24th. Complains of not having slept well during the past night - He has slept ~~some~~ since day break, but cannot enjoy sleep, it is so very heavy. His mind is clear when awake, but he mutters

in his sleep. Tongue slightly coated. There are slight muscular twitchings about the face. The erysipelas has not extended ~~any~~ for some days. He is still feble. Ordered. Continue the solution of Nitrate of Silver and the tincture of Iodine — the low diet and other treatment, enemata if needed &c.

June 25th. Better to-day. Stop all external applications. Let him eat a piece of boiled chicken for dinner.

June 28th. He has continued to improve and now says that he feels like another man. His mouth feels very unpleasant.

℞ Tinctur: Myrrhæ ℥ss
Aquæ puræ ℥ij
Mix Mouthwash. S. Use twice a day.

June 30th. Abscesses as a natural consequence of erysipelas have formed over the eyelids and on the neck. These were opened and a large quantity of

purulent matter escaped. Ordered a dressing of bread and milk, made into a poultice, to be applied to the gluteus and thigh. He now feels much better. Has more sensibility in the part formerly paralyzed and can move his leg more freely.

July 1st. Another abscess was found this morning on the left side of his neck and also one on the neck was opened. And purulent matter freely discharged. Complained of these as being very painful. Ordered bread & milk poultice. General condition very much improved.

July 5th. Some of the abscesses have been reopened. Yesterday he ate freely of chicken and other fresh meat for dinner. Appetite very good. He is up and walking about. Has a great deal more use of his arm and leg. Improvement very perceptible. Ordered to have his bowels attended to so that he shall not suffer from con-

stipation.

July 10th. still improving – ordered to have a liniment composed of the following

℞ Ol: olivæ

Ol: Terebinthinæ aa ℥ij Mspt liniment.

S. apply to the wrist and ankle of the paralyzed side three times a day. He is now walking about without any assistance save that of his cane. He can put his hand to the top of his head, which he has been unable to do since he received the injury.

July 16th. Getting better every day. The wound on his head is gradually healing ~~up~~. There was another abscess opened and various pus discharged. These abscesses now present healthy granulating surfaces. Feels very well, and very cheerful.

July 19th. Left the Infirmary to day.

This case was one of partial paralysis resulting from a blow on

the head. He was struck on the right side of the vault of the cranium, according to the rule there was paralysis on the left side of the body. Compression of the brain evidently being the cause of the affection. This we might have supposed to have come on immediately - but instead we see the gradual advance of the disease until loss of sensibility and motion succeeded. Medical means were without avail and death, after a lingering illness, would have been the inevitable result, had not some kindred agency been suggested to remove the depressed portion of bone, which acting mechanically caused the diseased state of the system. This was one of the glorious triumphs of surgery. The Medical Attendant informs the patient that he can do nothing to relieve him. Then the Surgeon feels

his importance - feels grateful to that power which has given him his sound sage and activity and steps forward with benevolent feelings and says - I can relieve you and prolong your life. After operations of this kind we generally see the relief immediate - in this case however the relief came slowly and we have every reason to believe that the object was ultimately obtained.

The second case to which your attention is invited is one of Phthisis Pulmonalis.

Thomas Rogers, aged 30 years - Native of Ireland - was admitted to the Baltimore Infirmary June 25th 1850. He has been four years in America - Works in a distillery where he has been in the constant habit of inhaling the dust

of grain and been subject to great extremes of heat and cold. His father died of breast complaint, and as far as he knows is the only one of the family who was thus affected. Ever since he was a child, he has been very liable to contract colds, and for the last four years has never been free from cough. For two years past he has been very much troubled with shortness of breath whenever he would exert himself or when his cough would be aggravated. About twelve months ago had a sharp stitch in his right side with increase of pain and cough and was obliged to quit work for 4 or 5 weeks. He has expectorated ~~phlegm~~ striated with blood at several different periods. About four weeks ago had to give up work on account of ~~his~~ increased cough – shortness of breath – and sharp pain in his left

side. He expectorates a tenacious mucus. Within the last month has been troubled with night-sweats and fever. When admitted condition as follows - pulse 120 and firm; respiration very much hurried. Physical signs - dullness on percussion - feeble respiratory murmur - symptoms of bronchitis. Prof. Wm. Gross saw him June 20th and ordered, as there was a great deal of pain in the lower part of his left side cups to be applied over the region of pain and the following ℞

℞ Tart: Antim: et: Potas grij
Mucil: Gum: Acaciæ ℥vi
Sympi: Solutani ℥ij
Misce Solut. S. Give ℥ß every hour or second hour, according to the degree of tolerance and cough. If there be any rise of fever - bleed him from the arm, till the pulse is affected.

June 27th. The symptoms are rather aggravated this morning - Ordered - bleed freely - continue the solution ord yesterday. If his bowels are not well moved by 8 Oclock P.M. give him a dose of Magnesia and salts as follow ℞ Magnes: Sulph ℥i

Magnesia: Ust: ʒp Mist ch i

June 28th. Pain in the side not yet relieved - Ordered - cups to be applied over the side and the following

℞ Magnes: Sulph ℥i

Pulv: Potass: Nit ℥i

Tart: Antim: et Pot: gri

Aquæ distill: ℥iv

Mist solut. S: ℥p every 4 hours until the bowels are well moved. If there is any rise of fever bleed him freely.

June 29th. The pain still continues very severe - Ordered - Bleed him from the arm and if this does not relieve him cup him over the seat of pain. Con-

time former treatment.

June 30th. This morning he spit up a very large quantity of purulent matter, and after this his pain was almost entirely relieved - his respiration was very much quickened, being now 78 in a minute, pulse 120. The bleeding and cupping have seemed to have little or no effect

Ord: ℞ Hydrarg: Submur grix
Pulv: Opii gri
Tart: Emetici gri
Mass in mass et in pill viij dividend.

℞ Give one every 2 hours. Stop the saline ~~saline~~ solution - Continue the Tartar Emetic solution (ord on 26th) every 2 hours, so as to alternate with the pills. If he do not sleep well - give him grx Pulv. Doveri at late bedtime.

July 1st. He is somewhat relieved.

Ordered - An Enema of lukewarm water ℥viij with a tablespoonful of common

tablesalt. The interval between the doses of the Medicine increased to an hour and a half - Pulse 90-100 respiration 36.

July 2nd. Cough very troublesome - Mucus expectoration very copious - pulse and respiration about the same as yesterday. The pain arising from pleuritic inflamation has ceased and the symptoms of Phthisis are now fully developed. We can now say that there is tubercular deposit in the left lung. Dullness over the left side very perceptible - Breath very fœtid - his expectoration has a very pungenous smell. Ordered. Stop the Mercurial treatment and give the following ℞ P. G. Acac ʒp

Aqua pure ℥vij

Mist Mucilaginosa Vin Ipecac ʒij

Tinct Opii: Camph: ℥ij

Symp: Scillæ ʒp

S. Give ʒp every 2nd, 3rd or 4th hour accor-

ding to the degree of tolerance.

July 3rd. He slept tolerably well during the night but coughed a great deal. Expectoration free and copious: complains of pain in the left side when he coughs. Pulse 112, respiration 40. Ordered the following

℞ G. Acaciæ ℥i
Sachar: Album ℥i
Morphiæ Sulph gri
Aquæ puræ ℥iss } Mist Emuls: S. Give ℥ss at bedtime, and if sleep be not produced – repeat the dose every 2 hours until it has the desired effect.

July 5th. Still complains of pain in his breast and shortness of breath – Feels much better in other respects – pulse 120 and rather weak, respiration 32. Ord. ℞ Morph: Sulph gri
Syrup Tolu
Hoffman's Anodyn: a a ℥i Mist Tolu: S. Give two teaspoonfuls whenever the shortness

of breath occurs.

July 6th. Slept well during the night and this morning feels very much relieved. The pain in his breast has left him. He breaths with less difficulty. Expectoration rather more free than usual; Pulse 90. Respiration 40. The dullness which was owing to pleuritic effusion is now clearing up. absorption is going on. His breath is still fœtid. Ord. If his bowels are not moved by 5 O'clock P.M. give an enema of salt and water. Same as before ordered.

July 7th. The symptoms are somewhat better. The enema acted well on his bowels. a free operation was obtained. He coughed less and slept well during the night. better than for sometime. Physical signs not so distinct as formerly. breathing and pulse better. decidedly more natural. Breath not so fœtid. Ordered. Ol: jecoris asselli: ʒjj three times a day.

July 8th. Feels no pain at all - but complains of great debility. Bears the Cod liver oil very well - Pulse and respiration about the same -. Continue treatment.

July 9th Feels very much better - having no pain -.

Thinking that a change of air would do him good - He determined to leave the Infirmary ward to-day.

P.M. He left about 2 O'clock - Much relieved. Any place rather than a hospital for a person affected with Phthisis Pulmonalis.

The next is a case of Typhoid fever - which terminated very unfavorably. Resulting in the death of the patient.

Michael Corrigan - aged 13 years. Was admitted to the Baltimore Infirmary June 11th 1851 - A native of Ireland. He has been in America about 12 months.

When about 4 years of age he had an attack of small pox, and an attack of measles soon after. With these exceptions his previous health has been good. He has no recollection of any of his family dying of breast complaint. He has been working with a chair maker since he came to Baltimore. Has frequently noticed that his knees trembled and he felt pains in his joints and soreness in his bones. About 2 or 3 weeks ago was taken sick - had fever in the morning and sickness at the stomach. Of this he thought he was relieved but a week or two afterwards caught cold - was taken with a very severe cough. When he coughs - feels sick and exhausted. Does not expectorate anything - Complains of no pain in the breast. When admitted - condition as follows - All the signs of bronchitis clearly distinguished - also consolidation - pulse 128 - respiration

nearly natural. He is rather more slender than when in good health - Thinks he has fallen away a great deal since he was taken with the cough -. The physical signs are better marked about the base than the summit of the lung -. He was delirious on the evening of the day of his admission - was seen by Prof. Samuel Cheever who ordered Mustard plaster applied to his chest and -

℞ P. G. acac ℥j

Pulv: Ipecac grij

Syrup: Tolu ℥j

Aqua pure ℥iij Mist Mucil - Dose.

Begin with a dessertspoonful and increase to a tablespoonful if his stomach will bear it. July 12th. He is complaining very much of his head - Fever very high - pulse still 128 - ordered the following

℞ Mass: Hydrarg grij

Pulv: Ipecac grss

Sodæ: Bicarb ℈ij Mist Cho ℥iij div:

Give one every two hours.

July 12th. Epistaxis came on during the night, and his head is this morning in consequence almost entirely relieved. Was quite delirious during the night – He complains of great depth of the bowels. Ordered – If bowels continue to be free give him ʒ.ss of Mist: Cretac: Comp: after each operation. Continue other treatment.

July 14th. Considerable febrile excitement. Pulse 108 – respiration 34. Tongue somewhat red especially at the tip and along the edges – pains in the feet and legs. He suffers from excessive thirst – appetite very much impaired. Bowels very costive –. Ordered – Calcined Magnesia ʒ.ss.

July 15th. The Magnesia acted very well. Fever rather less – pulse 112. His delirium continues at night. This morning he vomited freely after several attempts. Ordered – Continue former treatment.

July 16th. Pulse very much better this morning. He vomited again to-day – Pulse 120 respiration 34. Ordered – Stop the fluids.

July 17th. He has been complaining of deafness ever since he came into the Infirmary – but this morning there is a decided increase. He is very stupid and hard to rouse – complains of no particular pain – Tongue coated with yellowish looking matter – but red along the tip and edges – Mouth and gums sore – The system has been brought under Mercurial influence. Pulse and respiration about the same as yesterday – Febrile excitement continued – Considerable sordes about the teeth. The disease now looks more like Typhoid Fever than any thing else.

July 18th. Looks very much emaciated. His tongue has a thick white coating upon it – Mouth very sore – Pulse 136.

very stupid – Ordered – add gtt x vini: Antimonii to each dose of the Senna mixture ordered on the 11th.

July 12th. Still very hard to rouse – The stupor continues – Pulse 130 and very feeble – respiration short and hurried. The bronchitis is changed from dry to moist – Mucous rales distinctly heard. Ordered – Emplastrum Cantharidis 4 inches square over the top of the sternum – Keep it on until it reddens the skin and then apply a poultice, also apply a blister to the back of the neck. If diarrhoea continues – give ℥ss of Chalk mixture after each operation.

July 21st. No change in the symptoms perceptible. He is sinking very fast. Ordered wine and water freely every half hour. About 7½ P.M. he died. Post Mortem examination showed – Ulceration of the lower 2 feet of the small intestines and enlargement of the mesenteric glands. Lungs

were perfectly healthy – Ulceration and enlargement of Peyer's patches – The bronchial tubes were congested.

He concluded that these pathological changes were sufficient to account for this death – and also that he died with Typhoid Fever.

The next case to be mentioned is one of disease of the Stomach – supposed to be carcinomatous in its character.

Jennie Brown – Lady of color – aged about 50 years – Slave and lives with her Master – Mr Henry Lewel on Patuxent river. She always enjoyed good health 'till about 2 years ago – was first troubled with costiveness of the bowels. She had not been menstruating for 3 or 4 years previous to this attack of obstinate constipation. Pain in the Stomach

succeeded - and contraction of the muscles of the abdomen - She suffered some time ago with gravel or rather retention of urine. About 18 months ago she was taken with vomiting - She threw up her meals and a great quantity of bile. Has had an attack of dysentery since she suffered from this emesis. Her bowels are ~~regular~~ only when she takes medicine. Even when she has ~~regular~~ discharges produced by these medicinal agents, they are always with pain and straining. She has been confined to her bed for more than six months. She was admitted to the Baltimore Infirmary July 19th 1851. She had travelled some distance and was then very much debilitated. Symptoms as stated above and in addition to these, she mentioned that after taking any food or drink there is always a sensation of choking, as if she could

not get what she had swallowed into her stomach. She generally feels this in her throat until she vomits and then she is for a time relieved. Dr Chew saw her 20th of July and diagnosed – Chronic inflamation of the stomach – probably carcinomatous in its nature – Ordered –

℞ Mucil: G. Acac fl℥ss
Soda: Bicarb: ʒij
M℞ Solut et adde
Acid: Hydrocyanic gtt xij S. ℥ss every 2 hours. Keep her on a very low diet –
Ol: Jiglii gtt v Well rubbed in over the Epigastrium night and morning.

July 22nd. Ordered – Emplastrum 6×8 inches over the stomach and kept on 'till it smarts and then apply a poultice – Dress the surface on the next day with simple cerate.

July 23rd. Stop the medicine ordered on the 20th and give only milk

three times a day. Let this with a little lime water in it constitute her only diet. She says that she spit up some blood and pus during the night, but we found none in the basin.

July 26th. Her bowels were rather constipated this morning and she complains now of pain in her stomach – Ordered – Pulv: Rhei grij made into a pill and given at bedtime. This morning observed some thin light colored blood in her sputa. She said to-day – that before she came to the Infirmary she vomited up some dark and thick fluid resembling coffee grounds.

Ordered – Give an enema, if the pill do not produce any effect by the afternoon. Just as they were preparing the enema the bowels were well moved and consequently there was no need of any further interference.

July 28th. Yesterday not having had an

operation from her bowels, they were well moved at night by the following Enema.
℞ Muriat. Sodæ ℥i
Aq. tepid: Amylaceati ℥i
Aqua Bepidæ ℥iv M. ft. Enema
She feels better to-day – did not spit up so much blood during the night as she has been in the habit of doing for sometime – Ordered – Continue. Whenever the bowels are not regularly moved we must always give enemata. If we give cathartics by the mouth, they would produce too much irritation in the stomach – the affected organ.
August 10th. She has for a long time had great difficulty in passing her urine, but has been ashamed to mention it. She had an increase of pain in passing it last night. About a year ago she fell across a doorsill and on her right side. – After this accident she

had a hard tumor over the liver, for which she was blistered — It however disappeared and she grew worse rapidly. She then felt a pulsation in her stomach — this pulsation ceased for a long time, but now she feels it again and more when in pain than when at ease.

August 12th. She has been spitting up blood and complains of great burning and sickness at the stomach — Ordered — Stop the solution of Soda and Prussic Acid and give Sub: nit: Bismuth grs three times a day.

August 22nd. Complains of stoppage of the oesophagus and contractions of the muscles of the abdomen.

She left us to-day feeling much better than she has for years. She was greatly improved in health and appearance.

The next is a case of Purpura Hæmorrhagica complicated with Phthisis Pulmonalis.

James Crawford – aged about 20 years – Native of Ireland – He has been about one year in America – was admitted to the Baltimore Infirmary August 20th 1851. Labourer on the railroad beyond Cumberland Md. Previous health good. His Mother died of consumption. About three months ago he caught cold attended with cough and expectoration. From this he apparently soon recovered. In less than a month however he was taken sick. An eruption made its appearance on the lower extremities – a kind of reddish purple spots – persistent – for a week before the eruption manifested itself he suffered with sickness of the stomach and vomiting attended with tenderness over the Epigastrium. The eruption was attended with soreness of the extremities extending up from the hands

and feet. Ever since he was first taken sick he has been troubled with nausea and a desire to vomit. This occurred coincidently with the appearance of the eruption. About three weeks ago, since the appearance of the purple spots, he contracted a cold without any apparent cause – Had no fever or headache, but soreness in the right chest, from the exertion of coughing. This was attended with considerable expectoration of a reddish brown color, and generally free. For two weeks past has had fever in the afternoon about 3 O'clock. He has worked on the railroad ever since he came to this country, and as a consequence he has had no fresh meats – but salt meat and very few vegetables have composed his diet. Has had bleeding from the nose – His gums are very red around the edges – Has discharged a little blood from the bowels – Urine highly colored but

no blood.— Urine admitted condition as to colors.— Pulse natural — Skin in a good condition with the exception of the spots which have somewhat the appearance of the spots of Typhus Fever. Upon examination of his chest — observed — Physical signs — Obstruction of the upper lobe of the lungs in front and behind — Respiratory Murmur very feeble — Considerable dullness on percussion and increase of vocal resonance indicating condensation — Sensible Signs — The right shoulder was more elevated than the left — there was also bulging of the right side evidently proceeding from the same cause. There was slight curvature of the spine, but not sufficient to account for the elevation of the shoulder. Prof.r Samuel Chew saw and examined him on the day of his admission, and ordered — Good diet and porter at dinner — and the following

℞ Gum Acaciæ ℥ij

Ol: Terebinthinæ ℥ij

Sacchari Alb: ℥ij

Aquæ Cinnamon: ℥vj Misce Emuls.

S: Tablespoonful every 4 hours.

August 27th. His bowels have not been well moved for 36 hours. There are a great many deep red spots on his back — Bronchophony and tubal respiration were observed this morning. Treatment ordered to be continued.

August 29th. This morning respiratory murmur almost entirely gone — loud bronchophony and coarse crepitation are easily distinguished when he coughs.

September 2nd. There being not much change in his symptoms, and he thinking that a change of air would be better than the confined air of a hospital — for the disease of his lungs left the Infirmary to-day.

The next and last case is Pneumonia.

Frederick Stager — aged 17 years. Cheesemonger — Native of Germany — 20 years in America — was admitted to the Infirmary November 7th 1854. He is in the habit of drinking freely. About a year and a half ago had a severe attack of diarrhœa continuing more or less for 10 months — he would be relieved and after a few days another attack would come on. About 3 weeks ago after exposure to very severe weather, was taken with shiverings — followed by fever — short and dry cough and pains and stiffness in his limbs. The cough continuing was in a week accompanied by pain in his chest principally on the left side, which was increased by coughing or during a deep inspiration. For the last 3 days has had shiverings accompanied by flushes of heat — has not spit up any blood — Bowels moved about once a day. When admitted presented the following Symptoms — Pulse

88 and soft – Not much heat of skin – Cough very troublesome – Pain in the left side under pectoral – Expectoration principally of white mucus occasionally spits up a small quantity of blood rusty sputa – tongue has a slight yellowish coating – bowels moved yesterday – By percussion observed dullness over lower lobe of left lung posteriorly – by auscultation – bronchophony and bronchial respiration – fine crepitation – respiration 36 in a minute. He was cupped freely over base of left lung and ordered ½ of a grain of Tartar Emetic every two hours. Prof. Chew saw him on the 18th. & ordered – ℞ Mass: Hydrarg grxxi

Pulv: Ipecac grii

Nit Potas. ℈ij

Inf Cho ℥iij

S. One every 2 hours alternating with the tartar Emetic solution. Also Gum water

to drink freely during the day.

November 19th. No change of any consequence. The dullness seems to be more diffused — Complains of more debility. does not spit up any blood — Ordered — Continue treatment and if his bowels are not moved by 5 O'clock P. M. give Olei Ricini ℥j.

November 20th. The oil given yesterday afternoon acted finely and he felt much better afterward. This morning — pulse 68 respiration 28. Fine crepitation and much dry tubal respiration — Ordered — Continue treatment.

November 21st. — No change — Pulse and respiration about the same. Ordered — Continue.

November 22nd. This morning — Pulse 70 — respiration 24 — Still complains of great debility. In order to promote absorption more rapidly — to relieve internal inflamation by setting

up - or rather exciting - inflamation on the external surface - as an antiphlogistic remedy - ordered an Emplastrum Cantharidis to be applied to the posterior portion of the chest - and after redness of the surface is excited - Apply a poultice.

November 24th. Pulse 75 - respiration 24. This morning observed some streaks of blood in his expectoration - some tubal respiration and fine crepitation - his bowels were well moved yesterday evening - Feels decidedly better to-day and has no pain. Ordered - Emplastrum Cantharidis 6x8 inches to be reapplied to the lower lobe of the upper lung - posteriorly and kept on until complete vesication be produced. Continue former treatment.

November 25th. Not much change ordered - Give an enema this afternoon if the bowels are not well moved

Continue former treatment.

November 27th. Slight expectoration yet observed - Pt. very much better - Ordered Stop the Tartar Emetic and give infus Serpentaria ℥i three times a day - Continue the powders.

November 30th. He has gone on to improve from day to day - Complains of great debility. - Ordered - Stop the powders, but continue the infusion of Serpentaria.

December 1st. Has taken a slight cold He have fear of a relapse - Slight expectoration yet - Ordered - The same powders of Vine Mass and Ipecac with Nit of Potash: to be given as formerly, and renew the blister.

December 5th. No change for the worse - rather better. Ordered - Continue the powders and give the same Tartar emetic solution as formerly.

December 5th. Stop the powders and give Infusion of Serpentaria and Eupatorium.

℞ r. Serpentar:

Sol: Eupator: a a ℥ij

Aqua Boiling ℥j

Pour the water over the medicines and let them digest in a covered vessel for three hours then strain and give ℥i three times a day.

December 9th. Complains that his cough worries him at night. Feels nearly relieved. Ordered to have cough mixture at his side during the night.

He was dismissed from treatment on the 21st. He went on gradually improving untill the 27th of December he left the Baltimore Infirmary perfectly recovered.

William J. Morris
Resident student.

An

Inaugural Dissertation

on

Phthisis Pulmonalis

Submitted to the examination of the
Provost, Regents & Faculty of Physic
of the
University of Maryland
for the Degree of
Doctor of Medicine
by
Robert Johnston

of Virginia.

1852.

Phthisis

By this term is intended the form of tuberculous disease in which the lungs are the part most affected.

Since the exceedingly valuable and brilliant discoveries of Laennec and Auenbrugger, there is comparatively little difficulty in identifying pulmonary Phthisis.

When cough, expectoration, haemoptysis, wasting of flesh - not referable to loss of appetite, - hectic fever, night sweats, are associated in the same individual with physical alteration in the upper part of one or both lungs, the diagnosis can not well be mistaken. It is only in the very early stage, or when the tubercles

are scanty in number, and thinly scattered, & individually small that there is great difficulty in recognizing Phthisis.

Incipient consumption is perhaps more liable to be confounded with chronic bronchitis, than any other disease. They can however be pretty easily distinguished by attending to the morbid sounds; those of Phthisis being heard in the upper part, while those of chronic bronchitis are pretty uniformly confined to the lower lobes of the lungs. In phthisis the cough may for a long time be dry, but in bronchitis there is expectoration from the first. In bronchitis the pain is more confined to the region of the sternum; in phthisis pain most commonly affects the side, & the space between the shoulders. Haemorrhage is absent in bronchitis.

The next question, after a disease has been identified is — what is the remedy. The causes & nature being important only so far, as they point out, & guide to the proper treatment.

Of the predisposing causes, Inheritance is the chief. Almost every one in this climate knows that a right to phthisis is entailed, with as much certainty as is a title deed to houses or lands. Practically this cause is not the most important since the physician can do little or nothing to obviate it; no one has has authority to say to a phthisical man or woman, you shall not marry & propagate phthisis, — it is all the medical man can do if he, wards off some of its evil consequences — the root of the evil

is of course beyond his reach.
The long continued depressing
depressing influence of Cold.
Unwholesome air, — want of
proper food, & clothing. Confine
ment to sedentary occupations,
grief & anxiety, debilitating
diseases, Exhausting evacuations,
abuse of mercury are in gener
al terms the chief. The value
of the most of these is arrived
at by noticing the mortality
from Phthisis among individuals
& communities, that suffer from
or are exempt from their influ-
ence. The occupations that subject
to an atmosphere loaded with par-
ticles of dust, of metal, the needle
& fork grinders, at Sheffield are an
example, these men die before they
are thirty two years old, — The occu
pations which at the other extreme

is the one that allows the freest & most agreeable occupation in the sunshine, & at the same time does not expose to inclement weather: hence warm climates enjoy the greatest immunity from pulmonary phthisis. These facts are the most most useful in pointing out the treatment.

Though the predisposing causes of phthisis are various they appear to act in essentially the same way: the difference between long continued cold & typhoid fever in their influence on the human system, is more in degree, than thing else, the one requiring years to effect what the other can accomplish in a few weeks.

The tendency of all is to

induce a depraved state of the nutritive, or vegetative functions.

Every one knows that insufficient food, close confinement in impure air, want of exercise in the open air & sunshine, are incompatible with the most vigorous health & must necessarily tend to some form of disease; but why the evil effects should manifest themselves in the form exhibited in Phthisis, is a question, not likely to be answered, & practically it is of little concern whether it is or not: as it is not to be expected that such knowlege would aid materially in remedying the evil. We already know the causes that favor the formation of tubercles & the conditions to be observed in order to avoid

them. — It would be of very little value to know, in what precise mode heat & confined, and impure air of the city, favors the developement of Cholera infantum. On why an insufficient supply, the proper kind of provisions should engender Scurvy. The indications of treatment would continue to be pure air in the one case & a proper vegetable diet in the other, as at present.

It is important however to know the seat of lesion as accurately as possible, since without such knowledge one is constantly in danger of mis taking the remedy. — There is reason to believe there have often been mischievous mistakes of this kind committed. I need not say reason to believe — every

one that has heard much of practice knows that a distended bladder has been taken for Ascites, & has known phthisis to be treated as a local lesion.

The general appearance of one suffering from consumption ought to teach us that the disease is one of a general and not of a local nature. The wasting of flesh, supposing nothing more could be known of the more ultimate nature of the changes going on, would show that, there was a loss of balance between the building up & breaking down of tissues throughout the body.

The function of respiration is so extensive in its relations, that supposing the organic lesion in the lungs was a cause instead

of an effect. The other great functions would soon feel the effects & the disease would cease to be local. - However since all now admit that Phthisis is the result of a certain morbid condition - a Tuberculous or Scrofulous diathesis, there is no use in trying to prove that it is so. It is a matter of some curiosity however to know some reason for the chief manifestation occurring in the lungs, & again in particular parts of those organs.

The Tuberculous diathesis, from what is known of it, may be said in general terms to be a failure of the powers of the animal economy. To perform the functions under circumstances, which would not interfere materially with it did this deathness

not exist. The proximate seat of lesion, like its essential nature, can not be defined, but as before mentioned enough can be known for practical purposes. It exists between the first stage of digestion & the last process of assimilation, and since the first stages are subordinate to the last, which is highest it is the most reasonable supposition to allow the chief difficulty to exist in the elaboration that the elements undergo just subsequent to their conversion into the different tissues of the body. There appears to be a failure on the part of the cells or whatever other agency is employed in the elaboration of the fluid elements

that digestion & sanguification have supplied. The elements are not thoroughly vitalized, the requisite degree of plasticity is not attained. This supposition is render'd probable by the know disastrous effects of mercury on consumptive constitutions, which is due to its aplastic tendency

The preference given the lungs in the distribution of the tuberculous deposits, is in a majority of cases perhaps owing to their hereditary claim, But the peculiarity of the structure the anatomical & physiological relations of the lungs, offers a pretty good explanation as to why they should

be more than other parts liable to the evil effects of a general lesion of nutrition. Their extremely intricate structure, the extensive surface exposed to external morbid agents, including the air & the offending matter, that are so often suspended in it, the blood from the general circulation on the other side, the constrained & embarrassed condition in which their function is often performed all go to show that the lungs are peculiarly unfortunately situated as regards their own nutrition.

---

x According to the estimate of Mr Rochoux, the number of air cells grouped around each terminal bronchus is 17,790 & the whole number in the lungs 600 Millions!

that special organs are differently affected by general morbid influences. The predisposing causes of phthisis nearly all justify — if disturbed in what respect? It is certainly in their nutrition. This is plainly seen in injuries from mechanical violence, as also in acute diseases. — The difference between incipient inflammation & complete gangrene or Sphacelus, is that in the one case nutrition is slightly disturbed while in the other it is completely annihilated.

A man has inflammation of the right lung, in consequence of having been exposed to a cold rain, or from a suppressed perspiration; this is a general cause acting locally. It would not do to say because the right primary bronchus happens to be shorter and of wider diameter than

the left, the right lung received a larger dose of cold than the left. x It would be more reasonable to say the tissue of the lung attacked by pneumonia was from certain causes less able to maintain its own nutrition. I say from certain causes. The undue pressure from gravity retarding, excluding or detaining the blood in the right, in consequence of the habit perhaps of lying on the right side. The greater freedom of action of the right lung favors a greater influx of blood — one of the external agents, — thereby favoring the powers always ready to embarrass nature's efforts. — That is the habitual custom with most persons of lying on the right side, also the

x The principle would hold equally good if both lungs were affected.

the habit of using the right arm more freely than the left, allowing a greater expansion of that side of the chest, certainly will have the effect of causing greater functional action, (or rather, as also the reverse,) in the circulation, & for the same reason, it will be more liable to temporary engorgement, which will necessarily overpower the powers of nutrition in the part. — The influence of the cold I should have said is to drive the blood from the external surface, overload the internal organs. The right lung admitting a heavier screw of it, from the reason afore mentioned is the greater sufferer.

In the same way precisely we may say the base of the lungs — from their relation to the diaphragm allowing free motion — position favoring gravitation — &c they are more subject

than the upper lobes to congestion & inflammation.

The healthy physiological condition of the lungs is one of fully uniform expansion & collapse, subject of course to increased energy of action in proportion to the demand for more active combustion, or heat. & to when more rapid oxydation of the blood is called for by increased muscular action, But we must suppose a fixed standard of exercise necessary to integrity of function. In a great majority of mechanics leading a sedentary life the chest is very imperfectly expanded The muscles of respiration in the upper part of the chest are scarcely used at all, consequently the apex of the lungs are not sufficiently dilated, the air cells not

being only inflated their walls, remain in contact, will after a time adhere, the secretions from their surface, with the exhaled epithelium, will be detained, -- the nutritive process being extremely feeble in all parts, will on account of this increased embarrassment in this part, be completely disabled, its efforts are abortive. The partially elaborated material will, neither serve for building up the tissues or be thrown off but along with the detritus from the ivory structure remain as dead inert matter in the parenchyma or in the perfusate of the tissues; -- we must allow that a want of exercise in the lung as in other parts is prejudicial to their healthy nutrition, and there is good reason to believe the

Exercise of the upper portion of the lungs fully below the healthy standard; they are not adequately nourished, this, with the greater exposure to cold externally, tending to retard the ingress of blood afford pretty good reasons why the upper part of the lungs should be most frequently the seat of tuberculous deposite or lesion of nutrition.

The fact that portions of lung that have been bound down, by adhesive inflammations - are peculiarly liable to tuberculous deposite, also goes to show the mischievous consequence of a want of a proper amount of exercise; the fact that females are the more subject to phthisis also points the same way.

Supposing Jones' statement "that tubercles occur more frequently in the left lung" to be true. This view of the value of exercise would explain it. The left arm is used less than the right the corresponding lung will therefore be a little less freely expanded thus with the less favorable situation from gravity, from the reason before mentioned, & the arterial supply is ~~[illegible]~~ less generous, & therefore the nutrition is carried on less vigorously.

Knowing then, that impure air, depressing influences of cold or want of other comforts, mental disquietude, want of exercise greatly predispose to phthisis, & precipitate it when once developed. I say knowing all this the indications of treatment are

perfectly obvious. The treatment therefore is just as rational as in case of a fracture or gun shot wound, it does not follow however in the one case more than the other that the proper treatment will effect a cure.

The indications are pure air & sunshine, exhilerating objects to occupy the mind — at least as far as is "compatible with higher interests". This will include a pleasant temperature, & comfortable external circumstances, free exercise in the open air, and a generous diet. In the absence of these means no one has a right to expect a cure; or to say until they have been complied with that phthisis is incurable.

An Inaugural Dissertation

upon

Pneumonia

Submitted to the Examination of the

Honorable Regents and Faculty of Physic

of the

University of Maryland

for the

Degree of Doctor of Medicine

by

William H. Hardy

Howard County

Maryland

1852.

Gentlemen

In accordance with [illegible] regulations of the University of Maryland, I am now candidate for the degree of Doctor of Medicine, to present for the consideration of the faculty, a dissertation on some disease. I most respectfully submit for your consideration, a synopsis of pneumonia its pathological conditions together with the outlines of treatment as most approved of at the present day.

In doing so however I must beg the faculty's most charitable consideration of the many imperfections it contains.

Pneumonia is then inflammation of the substance of the lungs: in this particular all pathologists believe agree, but as to the precise part in which it does commence there have been a variety of opinions. The best pathologists of the present time I believe agree that all the lymphatics [illegible] the pulmonary substance in the parts affected are involved in the inflammatory process

of the fingers sometimes, when cut, will appear
red and a reddish frothy serum
oozes from it [illegible] with [illegible] it
abounds with [illegible] than does the
lungs. The mucous membrane, the small bronchial
tubes is of a deep red colour; showing engorgement
but not sufficient to sink them in water
All these appearances after death may be
caused by the gravitation of the blood to the most
dependent part of the lung: and the only way
we can distinguish between them is from antecedent circumstances and the situation of the
engorgement. If the inflammation is not arrested
then it continues to undergo further changes; its
white substance becomes red; crepitates no
longer upon pressure and sinks when put
in water; if cut into it sometimes presents a
red mottled marbling appearance
and has a smooth surface resembling the
cut surface of liver; hence the term hepatization
when cut with the knife [illegible] upon

[illegible] the commencement of suppuration will be seen. The hepatized is more dense and [illegible] than before, more friable and easily [illegible] and crushed; and is said to result from softening of the cellular tissue which holds the component parts together. If a portion of it be torn and the surface be examined with a magnifying glass it will appear to be composed of a crowd of small red granulations lying close to each other. These interstices are the air vesicles clogged up and thickened by the inflammation; and as no air is contained in the air cells in this stage of inflammation it follows that the organ will not collapse when the thorax is laid open; it will therefore appear increased in bulk. The marks of the ribs are visible on its surface and its texture is so rotten that a moderate degree of pressure will reduce it to a pulp.

These changes are sometimes confined

[illegible] tubercles and are called tubercular pneumonia: which increases & pervades the whole substance of the lungs.

In the third stage this dense solid and impervious tissue of the second stage undergoes an ulceration & cavities becomes of a reddish yellow colour & some conditions or it is of a greyish hue: sometimes mixed with black pulmonary matter and the texture of the lungs is more friable than before. In this state it is full of purulent matter and when an incision is made into it, there flows out [illegible] [illegible] [illegible] grow [illegible] [illegible] minute drops, or when pressed upon it breaks down and resembles a milky pus. Now from all these phenomena one would suppose that pulmonary abscess would be formed, but according to the critical observation of the most minute observers it is rare by itself unless combined with some other disease. Tubercles sometimes but rarely it is said

is the cause of inflammation of the lungs, for when it does occur the cough is of a dry nature & produces hard, moist and wet: emitting a most offensive odour, sometimes intolerable.

Pneumonia may be either double, or single that is it may attack one or both lungs or it may be confined to a part of one only and most usually where one is affected it is the right one, the proportion being according to observation as two to one in favour of the right one.

In regard to the part of the lung affected or in which it commences, it is found generally to commence in the lower part and extend upwards.

When there is pneumonia in [illegible] we constantly find the bronchia inflamed both large and small of the part affected. Bronchitis is always attendant upon pneumonia & the converse rarely; the investing membrane of the lung is usually inflamed also some pleurisy

It is indeed that to from since [illegible]
has been applied; Hitherto no [illegible] conditions
concurrent viscera and thoracic parts
considered separately.

Now the mesentaic lens which the foregoing
phenomena gives us enables us to understand
the various changes which are taking place
in the organ affected by the application of
the ear with or without the stethoscope to the
portion of lungs in question in a state of inflam-
mation by the sounds which reach the ear
we become aware of the existence of the dis-
ease by the peculiar crackling sound which
is indicative of the first stage. This diagnostic
sign is important and demands our first
remedial measures to overcome the first
indications of the disease.

When this minute crepitation is heard mingling
with the ordinary vesicular breathing it pro-
nounces the commencement of congestion, the vat
[illegible] sounds become [illegible] audible in the

inflammation increases until at last it is
latter suffocation. It is the last, ingurgitation
the second stage. The crepitating sound is now
loud and low until it is not heard at all; and
may be succeeded by the very different sound
of assume its natural healthy
respiration, preceded by the resolution of the
inflammation; or it may be followed by bronchial
respiration; or the metallic sound caused
by the smaller capillary vessels being filled
up by effusion into the cavity; another sound
here presents itself, namely Bronchophony a
sound produced by the solid and impervious
condition of all the small tubes.
The voice then descends through the larger
bronchial tubes, and sounds like the voice
of one speaking through a tube, a humming
and mellowing sound are audible; but in this
case articulation is not heard.
Sometimes we have no sound at all during
the breathing in consequence of the place

and injected epithelium of the inflammation

It is usually so also when there is a number of the larger bronchial tubes involved by the inflammation, and more distinct if the disease part be the least central parts than if it be superficial; then it may not be heard at all.

Again if the hepatization be general and complete so as to prevent the air from expanding in the affected side we hear no sound at any, and it is bronchial respiration

With all this we have redness in percussion the degree dependent upon the amount of hepatization. If a portion of sound lung be involved there will still be resonance though not natural

If the hepatization be superficial the sound elicited will be dull or flat.

In the sound lung there will be puerile respiration; an attempt at compensation for the loss of the affected one. This condition is one of painful and anxious interest

we cannot see whether the lung will recover to its normal healthy state or if it will pass into the third stage. If in a healthy condition there will be heard nothing: but bronchial respiration and slight crepitation begins again to be heard at the end of each inspiration; gradually it increases in extent and intensity, the bronchial breathing becoming loud and low, until it entirely ceases. The lung becomes again permeable to the air.

Hence the same symptoms occur again but in a decreased condition; retaining crepitation is heard in coarser and darker one in the other condition (the third stage) we have no accurate means of detecting its presence until the substance of the lung breaks down and is expectorated; bringing air into the cavity and then we hear a large gurgling crepitation; but other signs sometimes come to our aid when this

If you have read the preceding pages, you
will find the three degrees of pneumonia existing in different parts at the same time, and hence the tympanitic percussion, indicative of one stage, and the mucous rales, covering the life of the patient, at least the lower lobe. In some cases however we are unable to learn anything from auscultation indicative of its situation, as the whole lung, there is perfect vesicular emphysema, even more than natural; and this would lead us to believe that a portion of the lung has taken on a similar ~~action~~ disease. If the portion of lung affected be deep seated or central, or at a distance from the walls of the chest auscultation tells us but little about lobular pneumonia.

Such then are some of changes revealed by the successive changes of the disease.

One of the most constant symptoms elicited upon the commencement of the

disease a chill followed by neuralgia with increased urination, pain in the urinary appears only to exist when there is some pressing and then it is felt in the middle of the breast. The cough, full inspiration and sighs of pain or pressure on the intercostal spaces usually aggravate the disease. Sometimes pneumonia follows bronchitis, the lung, slowly from one tissue to another until the whole substance of the lung is involved. The expectoration may be either slight or severe according as the patient may degree in all or only a portion of the breathing apparatus for respiration.

Tuberculosis is a disease frequently occurring in the course of the disease and denotes an interference with arterializing the blood by the air in the lungs and is a measure to some degree of the amount of mischief which is going on within the thorax and a direct evidence that the

prominent symptom is the congestion of venous blood upon the brain.

The cough has no particular character and affords but little information. It does not usually take place in paroxysms, nor is the severity or frequency of its repetition to the disease.

It is usually dry in the outset but in a few hours it is accompanied by the expectoration of a peculiar sputum which constitutes one of the most certain indications of the presence of pneumonia and a symptom which we can all recognize. In well marked cases the expectoration consists of a transparent and tough or viscid colored sputum; uniting in the mass and forming them into one jelly like mass, and of such consistence that the vessel containing them may be turned upside down and shaken without their being detached from its bottom or sides. Now this kind of expectoration is not always present in pneumonia but when it is

see we that pneumonia is present. Even
the outset of this disease nothing more than
chance becomes is that, yet unlike the second and third
day then the matter expectorated assumes the
characteristic appearance that is tough, and
becomes commingled in a glutinous tenacious
mass; so long as this mass flows as rails along the
sides of the vessel so long may we hope that
the inflammation has not passed its first degree.
But when they acquire that viscid and tena-
cious consistence so not to fall therefrom
the sides or bottom of the cup then we know that
it has reached its second stage.
Now in this the second stage of the auscultatory
signs show us that the vesicular breathing
is abolished that bronchial respiration has
taken its place and if it continues to progress
to go onward and to terse the symptoms all become
aggravated the crest coloured sputum continues
or it may cease entirely; not that mucous ceases
to be secreted but that its expectoration is impossible

either on account of its extreme tenacity or on account of the patient's debility, the mucus accumulates in the bronchi trachea and larynx in secretion the air passages are filled up and suffocation follows: When all these symptoms are incipient or in a less aggravated in their character than I have here described, many are saved to recover when the expectoration becomes less viscid less red or yellow and more light. The expectoration of common catarrh. In the advanced stages of the disease the expectoration may consist of a thick of the consistence of gum water, or of a brownish fluid or the limpid water or plum juice. When this condition exists we may infer that the third stage has commenced and the patient, upon examination after death, that such diagnosis is safe and correct.

Sometimes very pure pus is expectorated in the third stage the colour of the matter

appearance depends upon the admixture of blood with the altered mucous.

The crust and orange colored sputa are commonly present during the more active stages of pneumonia; yet they do not invariably accompany it. Sometimes the expectoration is like that of catarrh, sometimes there is none at all. When it begins into gangrene the expectoration is of a greenish reddish or dirty gray, colour and exhales a fetid odour like that which arises from putrefying parts in a gangrenous condition.

I have thus far endeavored to consider the symptoms and conditions of pneumonia separately, but as more or less or indeed sometimes all of them present themselves during an attack of the disease, I shall consider them together in order that in future plans may correct or confirm those that may arise during the progress of disease.

The symptoms then that usually present

[illegible] are found in the
[illegible] [illegible] and cough
The pain may or may not be felt, and
the breathing is constrained and difficult
and the cough is [illegible] [illegible]
In this period the man may generally detect
a slight degree of mucous crepitation which
is not always enough to merit the designation
of the sound as pneumonic [illegible]
This assemblage of phenomena is usually ob-
served in the first or forming stage from the
second to the third day — now [illegible]
a [illegible] and [illegible] sounds have
ceased, being at first obscure, and having
a degree of crepitation superimposed to the murmur
of blood contained in it
The mucous crepitation increases and
drowns the natural respiratory murmur
and percussion yields a dull flat sound
on the affected side. The pain is [illegible]
the breathing [illegible] increased [illegible]

... [illegible] from the ... and frequently enjoined

... raised by the patient [illegible] of the pain he could

... [illegible] ... neither

can he place himself on the sound side, because

in that position his respiration is more laborious

... he lies constantly on his back

... This condition of pneumonia though ... [illegible]

... the inflammation is ... [illegible] ... primary

stage ... [illegible] ... remains stationary for a

while and then recedes and commences ... [illegible]

restoration. The ... [illegible] ... consisting

of small ... disappears ... [illegible] ... is gra

dually displaced by the natural murmur

of the pulmonary expansion; the sputa ...

... become those of Bronchitis, the fever

subsides and the patient recovers

At other times instead of these changes

it becomes more intense or more extensive

without passing beyond its primary stage

and the patient may die but not usually

ordinarily if the engorgement does not cease

[illegible] the lungs are overtaxed by the increase in volume of air, and the second stage will be established. If so the following symptoms will most likely present themselves. The breathing becomes more and more difficult and accelerated he cannot utter but a few words without gasping for breath; the sputum acquires such tenacious adhesive nature, to be loosened from the vessel containing them by shaking. We have a little minute crepitation without the admixture of vesicular breathing, percussion gives a dull sound and in that part bronchial respiration is heard and bronchophony is almost always heard. In this stage of the disease the prognosis is always uncertain. The patient often sinks rapidly and dies from apnoea. Not even in the degree resolution it is seldom may take place. In this case the dulness on percussion diminishes and all the symptoms

disappears in the same manner as does the first appearance.

As to the third stage we have no satisfactory means of detecting its existence we may however infer as much when the face becomes pale and corpse like, and we may be almost certain if the prune juice or jaundice expectoration occurs, and still more certain if the disease has existed for some time, not perceptible in the lung it is said has been found in a state of suppuration on the fifth day of the disease and at other times still in the state of red hepatization on the fifteenth or twentieth day after its commencement

When the lung has reached the third stage no one can say that recovery will take place in as much as we have no sure means of detecting its existence until after death.

I shall now proceed to speak of the treatment as indicated by the disease and

and approved by the most learned and scientific men in the profession.
And this is such as is adapted to influence
low diseases generally. Bloodletting, antimony and mercury are the agents which seem to have the most decided influence in subduing the inflammation.
If this blood letting is the chief, it restores or extinguishes the inflammation by retaining the particular functions of the lungs, by removing the dyspnoea that is caused by the excess of blood that is sent to it. It further tends, to restrain the effusion of lymph that is being poured out during the progress of inflammation, and thereby clearing its cellular tissues. We therefore accomplish two objects by bleeding; that is we lessen the amount of work the organ has to perform and at the same time we check the progress of inflammation. The amount of blood to be taken at one time can only be ascertained by the condition of the patient, and the stage

of the disease, and it will be effective
in proportion as it is resorted to, be early
or late. During its first stage, or the
stage of congestion and engorgement, and
before the stronger lesions of the lungs have
been established, blood letting exerts a most
salutary influence, and it should be
done while the patient is in an erect
position from a large orifice and continued
until some sensible influence
is manifested on the pulse or breathing or
until the breathing is easy.
Breathing in this early stage flow gives
speedy relief both to the pain and to the dyspnoea.
Sometimes the pain does not cease at
once, but goes off a few hours afterwards.
If the breathing be not relieved at first
the case generally ends badly, one bleeding
letting is rarely sufficient; and the patient
should be seen in five or six
hours after the first bleeding to ascertain

whether the relief has been permanent or not, this attention seems indispensable in order that too much time may not elapse before the second if required.

As an auxiliary to the lancet local bleeding should be resorted to, and much good is said to have been accomplished by it; and it is particularly indicated where there is much pain or too great a repletion of the system for general bleeding. The whole antiphlogistic treatment should be rigidly enforced the patient to keep his bed. Getting up and all usually exertion interdicted.

When the inflammation has attained its second stage we cannot expect the drawing of blood will have so decided an influence in the descendens impersonis again as in its first stage. But even here if moderate it will diminish the force of the heart and arteries and tend to prevent

the extension of inflammation it will behoove us to be careful quantity of blood circulating through those portions of the lungs which are still pervious and thus relieve the parts and favour the reabsorption of the exudate that has been poured out and relieve the vessels up

But there is a time when bleeding is injurious instead of beneficial when there is great prostration a weak wiry pulse then we should pause well before we resort to an agent so potent for good or evil

Fortunately we have two agents of acknowledged power as anti-inflammatory agents these are Antimony and mercury Antimony is not given with a view to vomit the patient but it sometimes does at first the system soon comes to tolerate its use If however it should continue as it sometimes does a few drops of laudanum will check it

In the second stage or when there is engagement of the substance of the lung we may expect no

benefit from the use of mercury than antimony
we have need some agent to act specifically on
the infiltrated organ, and in mercury we have this
agent, and we find by its peculiar influence over
inflammation prevents the effusion & promotes the
absorption of the fibrinous effusion. In two or three
grain doses combined with a little opii to prevent its
purgative effect we may soon expect to see a
decided improvement in the patient. Sometimes
the stomach is so irritable as to render the
patient unable to tolerate the use of mercury in
such cases the blue pills, hydrg cum creta or mer-
rial inunction should be substituted.
When the lung has become solid and impervious an
treatment must be guided by the circumstances
of the case. If the patients strength continues
or his pulse remains regular and firm we may
wait patiently the effects of mercury.
but should symptoms of sinking and prostration
come on we then should administer stimulants
and cordials such as ammonia, senega wine whey

and some tonic and nourishing diet.
Counter irritation goes a decided influence
over the affected organ but in the earlier
stages it interferes so much with the physical
signs that are given out by diseased organs in
preventing exploration by the ear; and in the earlier
stages of the disease when there is fever it only
tends to aggravate the disease producing pain
and accelerating his prostration. But in the
latter stages when the febrile symptoms
have subsided, their influence is often precious
and salutary, an aperient too is often given
with advantage in the commencement of the attack
to unload the alimentary canal, but continued
purgation would particularly interfere with
the specific influence of mercury and reduce
the patients strength which should be husbanded
as much as possible.
This then is the general outlines of treatment to
be observed in the treatment of this rapid
and fatal disease which I most respectfully submit

to the [illegible] for their inspection and [illegible] of
appointed

Upon [illegible]

An Inaugural Dissertation
on Adenology & Diphtheria
submitted to the examination
of the
Provost, Regents and Faculty
of Physic
of the
University of Maryland
for the
Degree of Doctor of Medicine
by
William H. Ross
of Baltimore
Maryland
February 17th, 1852

Gentlemen,

The subject which I have chosen for the paper discussion is the "Pathology of Dropsy." It is unnecessary for me to speak of the frequency, the consequence of the disease, the importance of an accurate knowledge of its Pathology, or my own inability to tell anything that which is already known concerning it: these, all will admit, and, my only aim therefore will be to embody, within these few pages, and in as concise a manner as I am capable of, all that is well known concerning its general principles.

By Dropsy we mean "the effusion of the watery constituents of the blood into some portion of the human frame, from which it cannot escape by any natural outlet;" and from this definition I intend to exclude all those Dropsies, which depend upon inflammation.

Often indeed we have Dropsies depending purely upon this cause, and indeed in every

case of inflammation there is more or less exudation of serum, but, there are cases occurring in which it cannot be detected either before or after death, and of these cases I wish to speak.

Wherever we have a serous membrane, or loose cellular tissue, there we may have this exudation taking place — occurring in the serous membranes constituting Hydrocephalus, Hydro-thorax, or Ascites; when into a small portion of cellular tissue, Oedema; or into the general cellular tissue, Anasarca; or when combined constituting general Dropsy. — In all these parts we have contained a portion of the watery constituent of the blood secreted for the purpose of keeping them moist, and in proper condition for the fulfilment of these functions; but, owing to some fault we have the serous sacs becoming distended and the cellular tissue so loaded as to act in many cases, injuriously upon the surrounding parts by mere pressure. Now this secretion

is generally small in amount, and in a healthy condition is again absorbed; but, it may be hindered, increased, or, that which has been secreted may not be absorbed.

Now we do have Dropsies resulting in either of these two ways — these depending upon the first cause (viz.) Mechanical secretion being simply active, and these upon the latter in diminished absorption, passive.

We will first speak of the passive, which we have said depends upon deficient absorption.

For a long time, Pathologists were unable to account for this form of dropsy, and in the most of their figures too much dependence is the Lymphatics, or, absorbents. Proper, and appearing of them a satisfactory explanation.

Many of them argued that Dropsy depended upon a deficient tone of these vessels, and the treatment therefore should be, to stimulate to increased action.

But in this doctrine of deficient tone of Absorbents, there is one grand difficulty viz.

that absorption was in and was rapidly too in persons affected with this disease. We find in them a gradual absorption of their adipose tissue and they becoming very much emaciated; we see also the parts coming under the influence of Mercury, which could not pass in unless in great excess without being absorbed.

It is now conceded that the veins are the vessels more particularly concerned in the absorption of the more fluid parts of the system and to them we must look in the explanation of the phenomena of Dropsy.

Now these facts set throughout as and the difficulty which was before so great, now vanishes.

The theory of endosmose and exosmose as promulgated by Dutrochet will very clearly explain all the phenomena of fluid Dropsy, and the most of those of the solid kind.

It is well known that fluids pass, and so pass through the coats of the vessels of a

being [illegible], but is only a [illegible] but merely mechanical transudation, and this process depends upon the fullness of the vessels.

When the veins are moderately distended, the entrance of more is refused, and when they are more largely distended, a portion of their contents is pressed out; and on the other hand when the veins are in a collapsed state, the surrounding fluid freely enters into them. This transudation depends upon the relative fullness of the veins, and there is supposed to exist a certain condition in which the fluid passes neither from within outwards, nor from without inwards.

Magendie found, from well conducted experiments, that by increasing or diminishing the amount of fluid in the vessels, there was a corresponding diminution or increase of the absorbing power; and, this fact is of some importance for us to know in cases of poisoning.

When a narcotic poison has

been taken, there may be an indication for bleeding, or, if such be not injurious, or it is deemed [illegible] that [illegible] [illegible] and [illegible] will [illegible] in the [illegible] and [illegible] means; the stomach pump or emetics.

Powerful [illegible] [illegible] [illegible] [illegible] of the Jugular; and, I think will be able to prove that they depend upon undue tension of the vessel, which [illegible] prevents absorption.

The [illegible] first take simple Edema, which is infiltration of the cellular tissue of a part, or in other words, local anasarca.

This can be produced at will, and depends upon the obstruction to the return of the blood from the part, and in a consequence induce an [illegible] the [illegible] beyond the point of obstruction returning from the heart.

Dr. Cowery tied the jugular vein in a living dog, and in a few mins found

all the parts beyond the ligature swelled with serous effusion. At another time he was used the [illegible] [illegible] it, veins through the diaphragm, and after death found the peritoneal cavity filled with fluid.

In the disease called Phlegmasia Dolens, which is common although not peculiar to the puerperal state, we have evidence existing of the cause in the affected side. Now a very evidence of this disorder is inflammation of the femoral vein, producing the effusion of coagulable lymph, blocking up the vein and thereby impeding the return of blood through it, and as a consequence, fullness of the vein beyond the point of obstruction.

In uncorrected cases Uremia, as, by pressure upon the femoral vein, produces the same result. Pregnant women are sometimes afflicted with swelling of the lower extremities, produced by the pressure

of the pericardium upon the ventricles, and, as soon as the pressure is removed or lessened, we have the dropsy disappearing.

In some cases of heart disease there is an enlarged or dilated or increased liver, and Dropsy in the peritoneal sac takes place.

A French physician has seen serous infiltration in the cellular tissue, from obliteration of the sinuses. In all these cases, there is from compression or other causes a diminution of the amount of blood returned by the veins to the heart, and as a consequence, a loaded condition of these vessels beyond the limit of compression.

The nearer we approach towards the heart with the compressing cause, the sooner will be the amount of serous effusion, and if we could put a ligature around the heart itself, we might now hoping in dropsy just of the body. Now there are

conditions of the heart in which we may have enlarged Dropsy. Or, we should have an enlargement of the left auricle and ventricle, increased size of the mitral auriculo-ventricular opening, and an imperfect performance of the tricuspid valve, constriction of the great vessels leading from the heart, such as the pulmonary artery & aorta, or anything which obstructs the passage of the blood.

Dr. Watson relates the case of a man who was emaciated in his upper half, his arms so large that he could not touch his sides with his elbows, his neck and face especially bloated and his eyes almost started out of his head. When this man died it was found that an aneurism of the aorta had, by its pressure, obliterated the descending cava just as it was about entering the pericardium.

From what has been said, it will be that passive Dropsy, depends for its cause

upon hypothesis, conceive that this de-
-ficiency of distention depends for its cause
upon disease, besides of the vessels leading
from the part, and that it is owing
to their compression or obliteration.

There has been no objection raised
to this explanation of the phenomena o-
-ccasioned by dropsy, but we think it very
good one. It has been said that
blood, and dropsy, in exactly alike, have
been found separate, and yet, no dropsy.
Now in such cases, we have no proof
that there never had been dropsy, the
obliteration not having been known until
after death, and the history of the patient
generally very obscure.

Theoretically, we should have dropsy
in all those conditions of the lungs in which
there is a diminution of the amount of the
proper pulmonary tissue, or where the
blood is retarded in its passage through
them by compression or obliteration of their

cases, but we prevent this by the active remedial agents, by bloodletting, for instance — which diminishes the amt. of blood coming through the vessels, and thereby prevents the pressure from being felt.

So also in cases of obstruction which we have been speaking of, there may have been gradual diminution of the amount of blood in the lungs, relieving, have with the compression; it is reasonable, therefore that such cases of obstruction should have been instantaneous, and if not, the same explanation which would answer for pneumonia, would answer for this also.

Again, it is now known that when the main artery coming to a limb has, for aneurism or some other cause, been tied, there is an instantaneous decrease in the temperature of the limb, owing to a deficient supply of blood, but, it is soon restored by the collateral branches taking upon themselves the office of the

[illegible], [illegible] may be said of the veins; [illegible], for the distributing branches are not so soon formed.

An example of this deficiency is remembered in Dr. Harris's practice, it is a case of a woman who had spitted a good deal of success in the medical world, of a considerable enlargement of the superficial veins of the abdomen, she was not dropsical nor was it known that she had been so, and the cause of the enlargement was unexplained, until after death there was found a complete obliteration of the descending cava and the blood had to circulate by the superficial veins of the abdomen, which, owing to this extra duty had become very much enlarged.

There may be such a case as this — a tumor growing gradually may compress a vein and this compression being proportionate to the growth of the tumor, the collateral branches have time to develop

thousand, and this is the [illegible] of the degradation in the circuit of circulation and Dropsy not arising.

Dropsy is sometimes said to depend upon debility - and cases are brought forward in which there is no disease of the heart and where no obstruction of any kind in the circulatory system can be detected. These cases are generally cases of Anæmia, and in them we have a pale colour of countenance, almost bloodless lips, and a weak flabby condition of the muscular system.

Now it is reasonable to suppose that the heart - the muscle - may be so paralysed of this linear weakness and be unable to send the blood in sufficient energy, so that the veins will be allowed to become distended & Dropsy arising as in the other cases. In this [illegible] we must have recourse to the treatment, if we give iron, bark and other tonics, we have all the symptoms

Typhoid, which could not be the Typhoid the Dropsy, supervened upon day the cause.

These are called cases of pure debility, and it is said that we can bind a vessel a patient into Dropsy, producing what has been called vicarious bachypia.

Another explanation has been given, which is this, it is supposed that the capillary circulation is more for remaining under the influence of the nervous system, and the blood being poor in quality and possessing a weak in quantity did not sufficiently stimulate the nervous system, so that, congestions would occur in various parts of the body, and the serous fluid thus escaping.

We will now proceed to another form of Dropsy, which from its coming suddenly has been styled active.

We have said before that there was a constant secretion of the serum of the blood going on from the free surface of serous

membranes, and into the cellular tissue, but besides this we have a great amount thrown off by the skin, the lungs, and the kidneys. If the secretion from one of these organs be checked, we may find a corresponding increase in that of the other, and this compensating influence is compatible with perfect health.

That there may be a diminution in the amount thrown off by an organ, and not a corresponding increase in that of the other and health still maintained, no one will doubt, but, if this disproportion exist to any great amount, disease will most inevitably result.

We have this benign influence exerted and in no case more clearly shown than in the balance between the skin and kidneys. On summer when from the great heat of surface, we have the secretion of the perspiratory glands, very abundant, that of the kidneys is very scanty, the urine being

[illegible] in [illegible], high colored, and [illegible]-centrated: in [illegible] on the other hand, the skin from the effects of cold, contracted and the vessels are much diminished, [illegible] [illegible] [illegible] and [illegible]. [illegible] [illegible] [illegible] is not [illegible], as [illegible] [illegible] [illegible] [illegible] [illegible] by of the [illegible] organs, [illegible], and [illegible] or [illegible] of the [illegible] [illegible].

We are [illegible] to [illegible] [illegible] [illegible] in some way, and they do so, by [illegible] a portion of their contents to escape [illegible] Dropsy.

We sometimes find Dropsy of the [illegible] [illegible] disappearing, and the patient would congratulate himself thinking himself [illegible], but we soon find him [illegible] with coma, the effusion having taken place into the ventricles of the brain. But sometimes a happier result may be [illegible], he recovered [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

[illegible] I was [illegible] it [illegible]
[illegible] was [illegible] with [illegible], and being
[illegible] in [illegible] with [illegible] [illegible] [illegible]
[illegible] "[illegible]" - that night he was [illegible]
very much with his [illegible] pressed with severe
vomiting and purging, & the next morning
he [illegible] on his [illegible] out [illegible] it was
[illegible], and [illegible].

If we inject warm lime water into the veins of a living animal, to see if [illegible] dying with
[illegible] or suffocation - sinking after death the
injection either into the cavities of the Pia-Mater
and ventricles of the brain, & the sinuses and
[illegible] cavities filled with serum. If however
before we inject we draw blood corresponding
to the amount of water we mean to inject, we
have no deleterious results following.

From these facts it would seem, that the
entire system of blood vessels is in a state of
dilatation or distension; their tendency is however
remedied by allowing the escape of their more
watery portion. Why this effusion should take

fever; in these cases readily from it do in death, we cannot say positively, but it is highly probable, that in those cases the fever is in a sense inoculated.

Still bearing in mind these facts we often detect Erysipelas in my fever: in many of them some degree of inflammation may exist, but in the most and they are those which in die, we demand — it does not, no more than we the skin when acted on by active irritants — the mucous glands have inflamed, or the mucous membrane of the intestines under the influence of an active purgative, &c; which cases are attended by an increase of the amount of blood sent to them, but with no inflammation.

Now let us take a case of Erysipelas, and see how far the facts which we have noticed will enable us to explain its phenomena: suppose a man, say, a laborer — has been at work digging in a ditch, gets himself heated, and stops to take his dinner — or, suppose after morning, he says

down in the [illegible] [illegible] [illegible] would
it [illegible] [illegible] [illegible], and in a short time
[illegible] himself completely [illegible].

Now in a case of this kind the cutaneous
skin is dried, the amount of urine is
very much increased, and all at once
suppressed; the kidney does not take upon
itself the compensating office, as we have the
[illegible] [illegible], [illegible] [illegible], [illegible] [illegible] blood.
There is therefore an increased amount of
fluid contained in the vessels and these
vessels unload themselves, by [illegible] a portion
of their contents into the urinary tubes.

Further, suppose a patient recovering from
scarlet fever, while the process of desquamation
is going on, ventures into the cold air, and
he is attacked with [illegible], [illegible] [illegible]
in this condition is very sensitive, and the
slightest impression made upon it is felt throughout
the whole system. The kidney which before had
been doing its duty perfectly well at once ceases
to act, and the fluid which it should have

[illegible] of it [illegible], and [illegible] [illegible] [illegible] before.

In this case, [illegible], there may be some degree of inflammation in the kidney itself, but the disease is such it produces dropsy in the same as in the other.

If the fluid which had been secreted in the tubes had escaped by any natural outlet dropsy would not have been and if this outlet had been the intestinal canal, there would have been a flux. The case of the man who got drunk gives us a very important hint in the treatment of dropsy. In his case we had the irritation of the intestinal canal, and blood sent to it than it received in a healthy state of the contents, and in consequence diuresis by passing from the contents into a flux, which was a substitute for dropsy under the intestinal canal. This flux we can produce at will.

By means of medicines we irritate the mucous membrane of the pores opening

glands, to produce a more copious secretion of serum. And thus diminish the amount of blood in the vessels, [illegible] then [illegible] is also [illegible] has been said to [illegible] in the same place.

Hydragogue Cathartics, Diuretics, and Diaphoretics act in this way; they produce an increased amount of serum from the various organs upon which they act, causing a diminished amount of blood in the vessels and rendering the veins better able to absorb the effused serum.

So with bloodletting, which more directly diminishes the amount of blood in the vessels, and is really one of the best remedies in the treatment of dropsy.

Dropsy is now divided into Cardiac and Renal, according as they depend upon disease of the substance of these two organs.

In Cardiac Dropsy, we have shown that venous congestion of the veins is the producing cause, and in proportion to the [illegible]

same action of the heart [illegible] which the ready passage of blood through it.

With renal Dropsy the case is not so [illegible]; but generally in the beginning we find the urine scanty - small in quantity, with albumen and often bloody, [illegible] very pre-sumably the amount of Dropsy depending upon the amount of this secretion.

To be more particular and to enter into the minute pathology of the diseases of the heart & kidney, which may produce Dropsy, will occupy more space than I have allotted to myself; and I will now close with the conclusions to be drawn from the facts which I have stated—

First, that the cause of passive Dropsy is seated in the veins, that there is undue fullness of these vessels, caused by some obstruction to the return of blood in them, and this obstruction, being seen [?] in the heart itself, has given them the name of cardiac Dropsy.

Secondly, that in the active form we have the cause [illegible] particularly in the [illegible] system; [illegible] and [illegible] by the retention of the [illegible] [illegible] [illegible] [illegible] [illegible] of the secreting organs, allow a portion of their secretions to escape — increased [illegible] — into the cellular tissue, or, some of the serous membranes.

An

Inaugural Dissertation

on

Inguinal Hernia

Submitted to the

examination

of the

Honorable Regents & Faculty

of the

University of Maryland

for the Degree of

Doctor of Medicine

by

J. Semmes Hexton

of

Prince Georges County

Maryland

February 1852

I shall now write my Thesis on the subject of Inguinal Hernia. The first part is to give a minute description of the anatomical structure of the parts concerned in its formation, with a knowledge of which its congenital or acquired character may be ascertained, but with a view to the life of its unfortunate victim, and the reputation of the operator must ever remain in doubt.

When an oblique inguinal hernia occurs the External oblique is inverted from its attachment to the front of the iliac crest of the Ilium into the inguinal ligament, forming the Iliac, the spine of the pubis, the pectineal line & front of the Os pubis. That portion of the tendon which extends from the spine of the Ilium to the spine of the pubis is named Poupart's ligament. In consequence of the separation of the fibres of the tendon at the latter point there is formed a ring, called the External abdominal ring. This

ring is situated about [illegible] an inch to the [illegible] is [illegible] [illegible] [illegible] the [illegible] of the [illegible]. Its direction is obliquely downwards & inwards; it is triangular in shape, basis [illegible] above, apex at the [illegible] of its base. From the edges of this ring are [illegible] [illegible] which are called the columns of the Rheumatic fascia, which covers as one of the coverings of the Hernia.

Beneath the External oblique is found the Internal oblique muscle. Its lower portion arising from Poupart's ligament is inserted into the pectineal line, most of the fibres having an arched deficiency below its curve. From the lower border of this muscle there are sent off a few fibres to the Spermatic cord constituting the Cremaster muscle which also serves as one of the coverings of the Hernia.

The next muscle that we meet with is the Transversalis. Its fibres arising principally from a line [illegible] the outer half of Poupart's ligament describe a curve having an arched deficiency, which with the deficiency of the

[illegible] of the [illegible]
[illegible] with the [illegible]
[illegible] a common tendon called the [illegible] which
tendon into the pelvic wall of the
pelvis. The insertion of this common tendon
is just below and in front of the obturator internus

Lining the inner surface of the
transversalis muscle is a layer of fibro-
areolar tissue called fascia transversalis.
This layer becomes thicker & denser as it
descends to be finally inserted into the crest
of the pubis & Poupart's ligament.
It is in this fascia that the inguinal canal
is formed. This ring is situated
about half an inch above Poupart's
ligament and about midway between the
spine of the os pubis and the anterior superior spinous process of the ilium.
From around the edges of this ring there
is given off a fold of fascia which
surrounds the testicle in the scrotum and
constitutes the tunica vaginalis of the

cord with the vessels, passes obliquely
forward.

In the fœtus the testicle is not originally seated in the scrotum but in the lumbar region of the abdomen, just below the kidney, in front of the kidney and that the testicle in its progress to descend & arrives at its destination, the scrotum, about the seventh month of uterine gestation. Its journey is a curious one. It descends along the psoas magnus muscle, collecting the weakest point in the abdominal wall of the abdomen, & finally passes through the opening in the fascia transversalis; then instead of pursuing a straightforward course, it inclines through the external abdominal muscle, it turns & passes down beneath the aponeurosis of the external abdominal ring, through which it emerges from into the scrotum.

The passage through which the testicle

passes from the pelvis to the scrotum
abdominal ring is called the inguinal
or femoral canal. This canal is
about two inches in length. Its direction
is obliquely forward, downward, and
inward, and lies in the groove
formed by Poupart's ligament. Above the inguinal
canal is the aponeurotic belt, behind it is
the fascia transversalis or aponeurotic
dura; in front is the aponeurosis of the ex-
ternal oblique, and below is the groove
formed by Poupart's ligament.

The testicle in its passage down, drags down
with it the peritoneum, which
forms a sac of the fascia transversalis.
These membranes accompany it continuous
to cover it through life. As the testicle
descends it drags the cord after it. The
position of the cord then shows the route
which the testicle takes. The cord however
is much smaller than the testicle and
fails to fill the canal through which that

[illegible] scrotum with the dimensions of the adult, although [illegible] while the opening in the fascia transversalis retains nearly its primitive size. Sometimes the peritoneal sac does not shrink, and the hernia remaining in such a case is called "Congenital Hernia." Sometimes the peritoneum is closed towards the abdominal cavity while the tube that serves to conduct the testicle remains unclosed. Hernia remaining in this case is called "congenital." As the testicle is passing through the inguinal canal it receives a slight fibrous [illegible] from the internal oblique muscle and carries them in before it. These fibres form the cremaster muscle. As it emerges from the external abdominal ring it pushes the intra-abdominal fascia before it. The testicle having descended into the scrotum with those coverings, namely: the

[illegible] fascia [illegible] [illegible]
[illegible] column fascia, [illegible] [illegible]
[illegible] through [illegible]. We will [illegible]
see that [illegible] [illegible]
[illegible] [illegible] that the
test of [illegible] it arrived at the in-
ternal [illegible] [illegible] that it [illegible]
with all its coverings.

Having thus concluded the anatomy of
the part I will now go on to the definition,
varieties, causes, symptoms & treatment of
Inguinal Hernia.

Hernia in the strict acceptation of the
[illegible] means a bursal projection; but it is
commonly applied to some more or more
of the abdominal viscera upon the abdo-
minal cavity. It derives its name from the
parts through which it protrudes. Thus
we have the inguinal, femoral, umbilical
[illegible]. It is only of the former of
these hernia that I am to speak to-
-day.

[illegible] the protruding [illegible] [illegible]
one in the [illegible] of the abdominal ring
the Hernia is called Inguinal. [illegible]
there are two varieties, Direct & Indirect

The projecting fold of peritoneum which
encloses the umbilical cord & divides
the Iliac fossa into two sub fossæ, the
Internal & External. If the viscera descend
along the internal fossa the Hernia will
be Direct. If along the external fossa it
will be Indirect Inguinal or Femoral. If
it descend along Poupart's ligament it will
be Inguinal. If below it Femoral.
Indirect or Oblique Hernia — This is that
variety of Hernia where the gut presents
itself at the place where the testicle first
presented itself, that is, at the internal
abdominal ring. If a knuckle of gut
comes to the internal abdominal ring,
the peritoneum as it has taken to the
cord must be pushed before it. This pouch

of the testes is called the sac of the Hernia having formed the first coat, it is at first the gut turns of passes along the Inguinal canal to the external ring. When in this situation it is called Bubonocele. Emerging from the external ring it descends along the scrotum in which case it is called Scrotal Hernia. As it descends the gut takes first of all the fascia covering it; but it shuns all the other coverings of the cord, namely: the fascia transversalis, the muscular fascia & internal column fascia, the spermatic cylinder. The gut rambles between the cord & the walls of these cylinders. The cord being left at the side in all cases except where the Hernia has existed for a considerable length of time, in which case the constituents of the cord may be separated & the gut found immediately between them. The neck of the sac is always found external to the Epigastric artery

Direct or Inguinal Hernia is that variety in which the gut bulges from the cavity of the belly directly through the abdominal ring (without reference to the Internal ring or Inguinal canal) carrying the peritoneum, fascia transversalis & conjoined tendon before it. As it passes through the external ring it pushes the intra-columnar fascia before it, and like the other variety it is of course covered externally by the skin and superficial fascia. The only difference between this variety of Inguinal Hernia is in the relative position of the sac to the cord & the coverings, and in its having no cremasteric covering. The cord is usually to the rear, the spermatic artery always on its outer side & the cremaster muscle is substituted by the conjoined tendon which is generally pushed before the Hernia. Sometimes however the conjoined tendon is pierced through. In consequence of

the difficulty with which the injection is displaced after the last of variety of Hernia is very rare

Hernia is commonly produced by some straining effort. Inguinal hernia is more frequent in males than in females and usually occurs in middle life. Often some violent effort the patient feels a little pain in the groin: he often wards notices a small swelling which disappears on lying down but reappears on rising. Often this is only the observation of the patient for years. He feels however a sense of weakness in the groin, which becomes greatly increased on walking and violent muscular exertion.

This is that variety of Hernia called "Irreducible", and the treatment consists in simply applying a truss and cautioning the patient never to take it off. While in

the best posture. Some of the
as have been recommended for this
disease appear to be so
"Hernia" [illegible] advantage
over some other. If it [illegible] on
[illegible] the fed should be fed out
into the intestine. If it is a direct
Hernia it should be put on the recumbent

Not unfrequently the patient remains
ignorant of the nature of his case
until the Hernia becomes "Irreducible" in
which case he will be liable to have
griping pains in the abdomen; frequent
attacks of vomiting especially after
a full meal or after assuming the standing
posture. In consequence of the
bowels being firmly held down, the
feces are more liable to be arrested
in their intestine. This state of
things constitutes the variety of Hernia
called "Incarcerated" and gives rise to

[illegible] of [illegible] and [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible] [illegible]
for a great length of time, but it is always
inconvenient and liable to strangulation.
The treatment is simple, it consists in applying a truss
[illegible] to suit the case, and the necessity of
[illegible] which confines the tumor and prevents its further escape, at the same time
rendering a comfortable support.
Patients laboring under this variety of
Hernia have, from various accidental causes,
been compelled to lie in the horizontal
position for several weeks at a time, and
upon recovering the Hernia has slipped
back with the [illegible] of [illegible]. This suggested
the idea that if the same plan be followed
with a patient laboring under irreducible
Hernia the same result might be secured
[illegible]. Accordingly the plan has been
tried and often with success. It is most frequently successful when this state depends
upon a deposition of fat in the omentum

Several methods have been proposed for the radical cure of the rupture of Hernia but with little success

We wish to know whether a Hernia is Direct or Indirect

Direct Inguinal, protruding the conjoined tendon never attains the same size as the other and is often a Bubonocele. Upon examining a patient laboring under Indirect Inguinal Hernia a point swelling will be felt along the line of the Inguinal canal and upon pressing on the canal a burning pain is excited, a phenomena that always attends pressure on a gut. In Direct Hernia the tumor inclines outward: in Indirect it always inclines towards the symphysis pubis. In direct Hernia the cord is behind and to the outer side of the tumor. In indirect the cord is directly behind the tumor

Strangulation is the subject of Hernia is said to have it strangulated. It is a con-

stricture of some portion of the gut which not only prevents its retention in the cavity of the abdomen, but also prevents the accretion of the fecal matter and impeds the circulation of the blood.

Strangulation generally occurs after some violent muscular effort causing a knuckle of gut to be suddenly protruded through a new or ruptured, or after having eat something which has distended the gut beyond its capacity. It may also arise from transportation of the neck of the sac or contraction of the muscles of the scrotum.

The patient is taken with a violent colic or lightning pain increases in violence ~~[illegible]~~ he feels a disposition to evacuate his bowels but has an inability to do so and the fæces are vomited up. The symptoms of inflammation quickly supervene. There is great tenderness about the tumor in the region of the abdomen and the

for the gain to the well. The constitution is exposed of great anxiety, there is great vomiting; the pulse is small & hard and an offensive mortification will ensue. This is known by the fearful rigor felt by the patient; the cold clammy sweat, the feeble, tremulous pulse and the natural hot surface which is cold and finally red appearance. These symptoms are very [illegible] of the folly that often has caused to lead a course should always examine for Hernia.

When this caused by a case of the congenital Hernia, my first object is to return the gut into the cavity of the abdomen by a force called "taxis". If this fail our last resort is to perform the operation

To perform taxis the patient is placed in the most convenient position for relaxing the constricting structures, the

System having been [illegible] of [illegible] in a condition the most favorable for [illegible] action.

To relax the abdominal walls the patient should be provided with pillows [illegible] thighs slightly flexed and elevated. The surgeon then assigns the tumor [illegible] it gently forward keeping it as completely [illegible] the front of the constricted. This should not be kept [illegible] than fifteen minutes [illegible]

For the purpose of relaxing the system the most important agents are, the Venesection, the hot bath, Opium, Tart: Emetic, [illegible] Tobacco &c.; But none innocent than some of these and none so potent than any of them is chloroform. This remedy has proved a valuable when all other means have failed to reduce the tumor.

All other means having unsuccessful, the last resort is to draw the tumor divide the sac at the stricture and return the protruding parts

The first step of operation. The director standing opposite the affected side makes an incision in the skin three inches in length in the direction of the axis of the tumor. The superficial fascia is then divided upon the finger. A horizontal slit is made into it, the grooved director introduced and then the finger first laying is forced into the groove and glided along under neath the fascia dividing it to the extent of the external incision. Precisely the same process is applied to all the other coverings until the sac itself is divided. This being accomplished the left forefinger is introduced and carried to the seat of stricture. If the **Hernia** be a direct one the stricture will be most likely to be at the external abdominal ring. If oblique the stricture will in all probability be at the internal ring; or it may be at both rings. When found it must be divided. This is done by conducting the flat side of a probe pointed

Distending slings [illegible] the [illegible]
stomach [illegible]. The edge of the [illegible]
is then turned up and a [illegible] in [illegible] the
the gastric [illegible]

After dividing the stomach the intestine is to be exa-
mined and if no signs of mortification or strong
standing adhesion exist it is to be returned into the
cavity of the abdomen. If adhesions have existed
for a considerable length of time they are not to be
disturbed. If very recent they may be divided and the
intestine returned. If the intestine be mortified the
the mortified the mortified parts are to be slit open
in which case there will be an artificial anus.

The subsequent treatment consists in applying a fine com-
press and bandage, keeping the bowels quiet
in 10 - 12 hours and in combating the subsequent in-
flammatory symptoms. Lastly a truss must be applied
before the patient leaves his bed

P. Thomas Morton